

STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

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In the Matter of: )  
 )  
Application for Certification )  
for the Pittsburg District )  
Energy Facility (PDEF) )  

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Thursday  
April 29, 1999

Council Chamber  
65 Civic  
Pittsburg, California

The proceeding was opened, pursuant to notice, at 1:21 p.m.

BEFORE: SUSAN GEFTER  
Chairwoman

DAVID ROHY  
MICHAL MOORE  
Commissioners

APPEARANCES:

For the Applicant:

ALLAN J. THOMPSON, ESQ.  
21 'C' Orinda Way #314  
Orinda, California 94563  
925/258-9962

For the Staff:

DICK RATLIFF, ESQ.  
Energy Commission Staff  
1516 Ninth Street  
Sacramento, California 95814  
916/653-1653

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P R O C E E D I N G S

MS. GEFTER: We are here to conduct evidentiary hearings on Enron's application for certification for the Pittsburgh District Energy Facility.

Before we begin we would like to introduce the committee, and then ask the parties to identify themselves for the record. The committee is Vice-chair Rohy, who is a presiding member, sitting to my right, and to my left is Commissioner Michal Moore, who is the associate member on the committee. To my far right is Bob Eller, who is the adviser to Vice-chair Rohy; far left is Shawn Pittard, who's adviser to Commissioner Moore; and I'm Susan Gefter, the Hearing Officer on this case.

I'd like to ask the Applicant now to introduce himself and the representatives of Enron.

MR. THOMPSON: My name is Allan Thompson. I'm representing Enron. With me today to my left is Mr. Sam Wehn, who is project manager for Enron. In the audience we have Robert Ray, who is the environmental, lead environmental consultant for the PDEF project; Joe Patch, who is lead engineer, consultant to the project; and, of course, our witnesses ready to go today.

MS. GEFTER: And staff, will you introduce yourselves?

MR. RATLIFF: I'm Dick Ratliff, counsel to staff.

MS. WHITE: I'm Lorraine White, the project manager coordinating staff's assessment of the proposed district energy facility.

MS. GEFTER: Thank you. Intervenors who are present, is there anyone here from CURE today? From CAPIT? From the City of Antioch? Yes, could you come forward and introduce yourself. I don't think we have a microphone back there.

MR. BRANDT: I'm Joe Brandt.

MS. GEFTER: You can use that one right there.

MR. BRANDT: Joe Brandt, with the City of Antioch, city engineer.

MS. GEFTER: Thank you, and is there anyone here from the Calpine Delta energy center? Come forward, please.

MR. BERTACCHI: My name is Bryan Bertacchi from Calpine Corporation.

MS. GEFTER: Thank you. Our public adviser's here, Roberta Mendonca, who's in back, and if anyone has any questions about how to participate or any other questions for our public adviser, she's available.

Do you have a statement?

MS. MENDONCA: Just, Susan, I wanted to mention that the wind is blowing and the sign-up sheets are kind of helter-skelter with the wind, so everybody please take an opportunity and sign in before it's over. Thank you.

MS. GEFTER: Thank you. Okay, so local agencies represented, from City of Pittsburg, is someone here from city? Come up and introduce yourself, please.

MR. LEWIS: Robert Lewis, member of the Pittsburg City Council.

MS. GEFTER: Thank you, and we'll call on you in a little while. Thank you.

Is anyone here from the air district today?

From the Delta Diablo wastewater facility? Yes.

MR. BAATRUP: I'm Greg Baatrup with Delta Diablo.

MS. GEFTER: Thank you, and anyone here from Cal ISO?

Okay, members of the public who are here, whether you're going to speak or want to introduce yourself, anyone here. Want to come up and introduce yourself, please?

MR. MacDONALD: My name is Jim MacDonald. I'm a resident of Pittsburg in the downtown area.

MS. GEFTER: Thank you, okay.

I'm going to again give a little background as to what we expect during the evidentiary hearings for the benefit of those who were not here yesterday. These evidentiary hearings are formal in nature. The purpose of the hearings is to receive evidence and to establish the factual record necessary to receive a decision in this case, to reach a decision.

The Applicant has the burden of proof, presenting substantial evidence to support the findings and conclusions required for certification of the proposed facility. Prepared testimony has been filed by the parties. We'll also be taking oral testimony today. The order of testimony that will be taken for each topic will be first presented by the Applicant, and then our staff, then CURE, City of Antioch, CAPIT, and Delta

energy center. We'll address the topics in the sequence contained in the hearing order, and if necessary we may continue a topic from day to day to a later date.

Witnesses will testify under oath or affirmation. During the evidentiary hearings, a party sponsoring a witness shall briefly establish the witness's qualifications and have the witness orally summarize the prepared testimony before requesting that the testimony be moved into evidence.

Relevant exhibits may be offered into evidence at that time as well. At the conclusion of a witness's direct testimony, the committee will provide the other parties an opportunity for cross-examination, followed by redirect and recross as appropriate. As warranted, multiple witnesses may testify as a panel.

Upon conclusion of each topic area, we will invite members of the public to offer unsworn public comment.

At this point are there any questions about the procedure? Yes.

Could you come up, I'm sorry, we don't have a mike in the back.

MR. MacDONALD: Hi, Jim MacDonald. Is the public able to question witnesses?

MS. GEFTER: No, the public can present comment to us and ask questions to the committee, and we could ask, we could direct our questions to the parties if we deem it's necessary.

MR. MacDONALD: Thank you.

MS. GEFTER: Okay. Before we begin, we have a few housekeeping items. We had discussed a May 25th date to conduct hearings on air quality, and at this point, having reviewed our schedules, it becomes apparent that the committee may not be available until May 26th, would be the evening of May 26th, and that is still a tentative date. But the 25th is unavailable.

So we will let you know more specifically over the next few days.

Again, we wanted to reiterate that although we will take testimony on air quality and cumulative impacts on water and on public health on that late May date, the record will slip day for day every day that the FDOC has not been issued and we will conduct hearings on the FDOC after the parties have an opportunity to review and comment on the FDOC.

With that, we are ready to begin. I understand that the representative from City of Pittsburg would like to address the committee before we begin taking testimony. You understand that your comments to us today are not testimony but rather comments. Thank you. Come forward. You can sit right there.

MR. LEWIS: Yes. Thank you.

MS. GEFTER: Please say your name again.

MR. LEWIS: Yes, my name is Robert Lewis. I'm a 10-year member of the Pittsburg City Council.

Madam Chairman, member of the -- members of the committee, I want to thank you for the opportunity to address you today. I know this is just one in a series of many hearings that are being held, and it's possible that some of my comments

may digress or actually get ahead of the field a little bit, but nonetheless today was the opportunity I had to be here to address you. So I'll try to keep my comments brief.

I'd like to speak real briefly about the economic development opportunities and the economic benefits that this project has the potential to bring to the city of Pittsburg. When we formed a municipal utility district several years ago, we were the first city with a population of over 50,000 to form a municipal utility district in over 50 years. We did this because we knew the energy field was entering a deregulated time frame, and it was our hopes to position the city of Pittsburg to derive the maximum economic benefit from this possible deregulation.

Our first move was to acquire the power transmission facilities at the Mare Island naval shipyard from the navy when that plant was closed. But that was a precursor. Our intention all along was to try to create a public-private partnership where the city of Pittsburg could directly benefit from providing energy to both our residents and our commercial-industrial base and participate in the economic advantages that the deregulated energy field would provide.

We actually gained national recognition for having formed a municipal utility district, and we were written up in several publications around the country. Having been on the council for over 10 years, I've dealt with many projects and many developers. And I can only say that Enron has made every attempt to be a good corporate neighbor for the city of

Pittsburg; at considerable cost to themselves, they have agreed to reconfigure the plant in such a way as to move the smokestacks further away from the residential area. They voluntarily added additional landscaping to their project. They've undergrounded utilities and transmission lines wherever possible beyond the original scope that was proposed in their project. They've reduced the heights of the towers at the end of the transmission lines. They've relocated the transition stations to an area that is less visible to the public. They've negotiated a union labor agreement for the plant. They've agreed to open and have opened a local downtown business office to help revitalize our downtown area. They've formed a project advisory committee within our community to try to address concerns that different citizens have had.

Because we as a council realize that although the economic benefits of this project are very large, it does come without some degree of impact on our city. And Enron has tried very hard to mitigate those impacts wherever possible.

So I can only say that I wish every developer and every project that came to the city of Pittsburg showed the same degree of willingness to deal with the issues that their project was creating for the city as well as the benefits that they are bringing. And I can only say that we at the city of Pittsburg are very excited about the long-term economic possibilities that this project brings, and we are very comfortable in the public-private partnership we have formed with Enron. They have given

every indication that they intend to be a very good corporate neighbor and corporate partner in this endeavor.

So that's the extent of my remarks. If there's any questions, I would certainly be willing to try to answer them at this point.

MS. GEFTER: Thank you. Questions?

Thank you very much.

MR. THOMPSON: Actually I have one.

MS. GEFTER: Yes, certainly.

MR. THOMPSON: Mr. Lewis, as long as we're singing the praises of the people that pay my bills, isn't it true that Enron also helps in things like the seafood festival and some of the many civic gatherings and events that you have here in Pittsburgh?

MR. LEWIS: Yes. I guess I intended my statement that they were a good corporate partner and corporate neighbor to encompass the fact that they've been involved in numerous local endeavors to better our community. I know they've worked with the Pittsburgh Historical Society and, as you mentioned, the seafood festival, and many other neighborhood organizations and neighborhood groups. All comes back to what I've said, that they've given every indication that they're going to be not only a good corporate neighbor but a good corporate partner for the city of Pittsburgh.

MR. THOMPSON: Thanks.

MR. LEWIS: Thank you.

MS. GEFTER: Thank you very much.

Want to go off the record for a moment.

(Discussion was held off the record.)

MS. GEFTER: Back on the record.

Is the Applicant prepared to bring their witnesses in on biology, noise and visual resources today?

MR. THOMPSON: We are. Applicant would like to call Mr. Steve Kellogg in the area of biological resources.

MS. GEFTER: Thank you.

MR. THOMPSON: And while he's setting up, let me give a brief word of explanation of our exhibit numbers. You'll hear me refer to Exhibit 1-dash, and then a series of numbers. The series of numbers refers to those sections of our application for certification. So our entire AFC would be Exhibit 1 with the sections delineated after the 1-dash.

Similarly, all of our responses to staff data requests are in Exhibit 2. So, for example, when I ask Mr. Kellogg if he is sponsoring 2(dash)-BIO(dash)-1, that is our response to staff's biological data request no. 1.

Thank you.

MS. GEFTER: Thank you. Okay, would the reporter please swear in the witness.

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Whereupon,

STEPHEN KELLOGG,

having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Would you please state your name for the record?

A Steve Kellogg.

Q And are the Steve, the same Steve Kellogg that's  
prepared testimony that is contained in Exhibit 30 in this  
proceeding?

A Yes, I am.

Q Do you have any corrections, additions or deletions to  
make to that material?

A No, we don't at this time.

Q Would you please give the committee and the public a  
brief summary of your testimony on biological resources?

A Let me briefly just cover sort of how we put the study  
together and the methodology. Per CEC guidelines, we looked at  
project study area for biology which was a one-mile radius  
around the proposed plant site, and in addition, a 1000-foot  
buffer around all linear features. We used basically three  
sources of information for our studies, existing information,  
including just I give you three examples, the CNDDDB database,  
which is the California natural diversity database. It's a map  
system of sensitive plant and animal species throughout the  
state.

A second source was the California Native Plant  
Society rare plant database, similar database. And then lastly,

the National Wetland Inventory, which is put together by the Fish & Wildlife Service.

Field surveys were conducted during two periods. The first period was the spring of 1998, in April and May, by Ms. Jennifer O'Connell, who is a certified wetland delineation biologist, as well as a plant botanist. In October of 1998, after some of the linear features had been revised, we had a second survey, a followup survey, done by Ms. Karen Wilson, also certified wetland delineation biologist and plant biologist.

The third item that went into our methodology for the studies was modelling. The modelling was a compilation of the air quality, the people that did the air quality modelling, we took their maximum model NO-2 and SO-2 emissions, maximum emissions from turbines and boilers, and we looked at that in two ways, as it would impinge upon biotic communities as air emissions and then also in the soil, and we compared the soil, the predicted soil concentrations against thresholds that are used by the United States Forest Service for class 1 wilderness areas, which is a very stringent, conservative, worst-case analysis, and found that we were order, at least one and two orders of magnitude below those thresholds.

At the conclusion of our studies, we looked at impact analysis and proposed mitigation measures. Those mitigation measures have been enhanced upon somewhat by the CEC staff in terms of how monitoring would be done and where it would be done and what the qualifications would be.

At the conclusion of the CEC staff's report, I reviewed the testimony of staff. I have concurred with testimony, and it is our opinion that all significant impacts would be reduced to less than significant with the proposed mitigation.

Q Thank you, Mr. Kellogg. Am I correct that the field surveys and modelling were performed by you or under your direction?

A Yes, I supervised all the biology studies, including the air quality modelling.

Q And am I also correct that what you stated at the end of your statement was that you have reviewed the conditions of certification and verification thereto in the staff's final, in the staff's assessment and would recommend to the Pittsburgh District Energy Facility that they accept those conditions?

A Yes, I do.

MR. THOMPSON: Thank you very much.

Mr. Kellogg -- no, one more thing.

BY MR. THOMPSON:

Q Am I also correct that you are today sponsoring Exhibit 1, section 1-5.6, biological resources, and Exhibit 2, 2-BIO-1, our data request to the staff that describes the inundated areas?

A That's correct.

MR. THOMPSON: Thank you very much.

Mr. Kellogg is tendered for cross-examination.

MS. GEFTER: Staff have any cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Okay, does City of Antioch have any questions of the witness?

MR. BRANDT: No, ma'am.

MS. GEFTER: Okay, I have a question regarding the wetland habitat. There was in both the AFC and in staff's testimony there was reference to transmission line 10-A which would degrade wetland habitat potentially. And as we understand from testimony yesterday, the Applicant is no longer going to use that 10-A route. Is that accurate?

THE WITNESS: That's my understanding, but can we confirm that?

MR. THOMPSON: I think that's right.

MS. GEFTER: Okay, so the testimony regarding line 10-A and the possibility of degrading wetland habitat is no longer relevant; is that correct?

THE WITNESS: That's correct.

MS. GEFTER: So as far as you know, the project would not need to acquire a section 404 permit?

THE WITNESS: The way the project is designed right now, it would not.

MS. GEFTER: There is a condition in staff's testimony regarding wetland habitat, and it's at page 329 of staff's testimony, and I would also ask staff this question but since we have you there, and you said that you have reviewed all the

proposed conditions and find them acceptable, there is a discussion of protecting wetland habitat on, let's see, okay, well, what, there are a series of bullets on that page.

THE WITNESS: Right.

MS. GEFTER: Okay, one, two, three -- five, it refers to route 10-A again, and I -- and it also talks about minimizing inadvertent degradation, of loss of wetland habitat during construction. Is there going to be construction activities on potential wetland habitat?

THE WITNESS: My response to that is that 10-A if it's no longer in the project, that would not be accurate. The way this was originally written, and, of course, we did our, I mean, our assessment, and then staff has had their assessment, is that at any point if any transmission line would be close to impacting any wetland it would be spanned. But my understanding at this point is that would not be needed unless the Applicant can clarify that. I think that that's no longer an issue.

MS. GEFTER: All right. There was some, again in staff's testimony which you indicated you had concurred with, there was a discussion of the Applicant's filing an application for a streambed alteration plan, which would be filed with the Department of Fish & Game, and has that application been filed, and what is the time line for receiving approval of that plan?

THE WITNESS: Again maybe we can turn to the specific page, but my understanding, that was originally an issue with Dowest slough, and I no longer believe that that's an issue. That has been dropped.

MS. GEFTER: Okay, the reference that I found was at page 321 of staff's testimony.

THE WITNESS: Let's see, where on that --

MS. GEFTER: At first full paragraph --

THE WITNESS: Okay.

MS. GEFTER: -- about the third sentence where it talks about mitigation measures required pursuant to Fish & Game code section 1603.

THE WITNESS: I think that is the -- I think that's the area I'm speaking of. Maybe we could ask Marc if that's his understanding. Because I remember we went through several different correspondences with Fish & Game on this and they did have a concern originally, but it was all at that location that I no longer believe is in the project.

MS. GEFTER: All right. There's also a reference to potential impacts on aquatic species and that would be taken care of under the NPDES permit of Delta Diablo. Are you familiar with that concern?

THE WITNESS: Yes.

MS. GEFTER: Describe that to us?

THE WITNESS: Well, the issue there was that would there be any impacts from, to water quality from releases, and our opinion is that that water would all have to be released under the existing NPDES permit, and that none of those conditions can be violated, and therefore that the permit that's in effect should be protective.

MS. GEFTER: All right. Do we have nay other questions on the committee?

MR. ROHY: I'd like to ask a question, actually, of Applicant's counsel in this case, and yesterday I believe that Applicant made a commitment to get an up-to-date drawing of where the linear facilities would be, without options on it, and that should be available to -- the question is when will that be available, because it'd be nice for the public to also see that.

MR. THOMPSON: That will be available, at the risk of having something thrown at me from the audience, that will be available before our first hearing next week, and what we've talked about is eliminating the options and highlighting in colors so the different lines can be delineated for the public.

MR. ROHY: That would be very helpful, so we know which lines that we're talking about when we get into these discussions.

MR. THOMPSON: I agree, sir.

MS. GEFTER: Okay, thank you. Do you have any redirect of your witness at this point?

MR. THOMPSON: No, thank you.

MS. GEFTER: Okay, we will now move on to staff's witness on biological resources.

(Witness excused.)

MR. RATLIFF: The staff witness is Marc Sazaki.

MS. GEFTER: Would the reporter please swear the witness.

Whereupon,

MARC SAZAKI,

having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

MS. GEFTER: Before the witness begins, I wanted again another housekeeping item that's coming up in the middle of testimony. With respect to all the witnesses who testified yesterday and who are prospectively testifying today and next week, we have resumes regarding their expertise in the fields in which they are testifying, and rather than asking each witness what their expertise is in any particular field, we are allowing that witnesses testify as expert witnesses without objection from the other parties.

Can we get a stipulation that the parties do not challenge the expert witness -- expertise of the witnesses who are testifying as expert witnesses in this case?

MR. RATLIFF: Yes.

MR. THOMPSON: I will stipulate, but I have one replacement resume and a new resume that I have here, so I was -- they're both in water which is going to be heard tonight.

MS. GEFTER: Okay.

MR. THOMPSON: So --

MS. GEFTER: You can introduce them at that time, yes.

MR. THOMPSON: Fine.

MS. GEFTER: But with respect to the witnesses who will have testified to date, I understand there's no objection from any of the parties regarding the expertise of those expert witnesses?

MR. THOMPSON: Absolutely none.

MS. GEFTER: Okay.

MR. RATLIFF: That makes sense to us. We intended to put on two witnesses who are actually not staff witnesses but who for the convenience of the committee we would put on, Peter Macken from the ISO and a representative from Delta Diablo water district as well, and we'll briefly go through their responsibilities and their expertise, their qualifications, before they testify.

MS. GEFTER: Okay. Thank you.

Okay, now you can present your witness. Thank you.

#### DIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. Sazaki, did you prepare the portion of the staff assessment titled biological resources?

A Yes, I did.

Q That's Exhibit 28, and did you prepare the supplemental testimony for that subject as well?

A Yes, I prepared the errata for --

Q That's Exhibit 29 or portion of, thereof. Is that testimony true and correct to the best of your knowledge and belief?

A Yes, it is.

Q Do you have any changes to make in it at this time?

A Well, in the original testimony I did not consider the change in the height of the transmission towers, as it may impact birds through collisions, and I believe that with that

lowering of the height of the transmission lines the impact would be considerably reduced.

Q What was the original height of the towers, do you recollect?

A 150 feet.

Q And originally they were 175, then it was 150 and now they're 75?

A 75.

Q But did you just say that the impact would be reduced by that change in the project?

A That's my belief, yes.

MR. ROHY: Excuse me, could you speak up so everyone in the room can hear both of you, please.

Maybe we can --

THE WITNESS: I don't think the microphone affects it so I'll try to speak up.

BY MR. RATLIFF:

Q Can you summarize your testimony briefly?

A Yes, my assessment is based on the ASC submittal and a supplement to that, my attendance at workshops and site visits. The laws that the principal laws that I were, was reviewing when developing this assessment included the federal and state endangered species act, the section 404 of the Clean Water Act which deals with wetlands and filling in wetlands, and the streambed alteration agreement requirement of Fish & Game which is in section 1603.

And using that as a kind of a base there're other laws and regulations but these are significant ones that are pertinent to this particular geographic area. I evaluated the potential impacts on the site which is highly disturbed and formerly used for industrial purposes for many years, 40-plus years. So it's a site that has somewhat recovered in terms of the vegetation, but most of those species of vegetation are weedy in nature, and the types of wildlife species that could inhabit the site are fairly common and more or less considered pest-type species.

But even though they're still value to that site for native wildlife but it's reduced in nature. The linear facilities also will be routed through residential and fairly heavily industrialized areas. The trenching for the gas line and water lines are some concern but mitigation measures are being proposed by the Applicant who will minimize any of those sorts of impacts on animals becoming injured or lost through falling into trenches and through their construction measures.

The transmission lines and the tall structures were a concern for potential electrocution or collision with these structures, although the height is not generally considered a significant potential for impact; there is a possibility. So to deal with that we're proposing a monitoring program which will be incorporated into a biological resource mitigation, implementation and monitoring program which the Applicant will detail those measures and the scope of those monitoring programs.

And the reduction in the height of the towers would simply reduce the need to extend that monitoring for that portion of where the towers originally 130 feet high. But the stacks are still above a hundred feet and there will be monitoring around the site to try to get an understanding if that's a potential problem. And that is a termed monitoring program which will terminate after a few years when it's found whether or not there's any problem.

The other issue of the cooling water discharge to the New York slough and the potential for impacts there. I examined the potential concentrations of particular constituents that might be harmful to aquatic life, and based on our water resource staff assessment and projected concentrations, it appears that those levels are well below the national ambient water quality criteria that's established for protecting aquatic life. So it doesn't appear to me that there will be a significant impact on aquatic resources.

And I think the basis for those estimates and how they were derived will be covered in the water resources discussion later this evening.

In summary, I think that the project will not create significant biological resource impacts and the Applicant has proposed measures to mitigate potential construction impacts, so that the overall biological impacts will be acceptable, in our perspective.

Q Does that complete your summary?

A Yes, it does.

Q Do you recollect the discussion with the prior witness concerning route 10-A which was a wetland habitat?

A Yes, I do. That particular one, I understand that's not an alternative route now, so any impacts associated with that will not be a concern.

Q And do you recollect whether that was the only wetland habitat that would have been affected?

A No, I think I was lost on the pages that the Chair was discussing as far as --

Q I think 329.

A -- exact reference where it might have referred to 10-A plus some other areas.

Q I think they're referring to this one.

A 321?

Q Yes.

A But I think I can explain that if I just can find it here, 321.

Q Yes, right here.

A Oh, that has to do with 1603. If there is no -- is this the section that you, Ms. Gefter, were referring to?

MS. GEFTER: Yes.

THE WITNESS: And it was the 1603.

MR. RATLIFF: You're talking about the --

MS. GEFTER: And that was one section, that was --

THE WITNESS: Okay, that was, okay, there, at one time there was a proposal to cross Dowest slough on one of the linears. But that has since been abandoned, so that would not

be of concern. And there'd be no need for that streambed alteration agreement in that instance.

MS. GEFTER: Also page 320 there's reference to transmission line 10-A.

THE WITNESS: Okay. Okay, that will not occur now, so that can be discounted from the assessment.

BY MR. RATLIFF:

Q Does that complete your testimony?

A Yes, it does.

MR. RATLIFF: The witness is available for questioning.

MS. GEFTER: Does the Applicant have cross-examination for the witness?

MR. THOMPSON: No questions.

MS. GEFTER: Any other party, including City of Antioch, questions for the witness.

Does our commission, our committee have questions?

MR. ROHY: I'd like to ask Mr. Sazaki whether in his expert opinion the change in tower line height would require the restudy of the biological impacts?

Would you have to go back and conduct your study over again, or as I believe you said that I won't put words in your mouth, please tell me what the impact is and whether we need to restudy it.

THE WITNESS: I suspect that by lowering the transmission line heights the potential for collisions would be less. And there were no real studies on that in the area, but

the way we and the Applicant agreed to deal with it was to have a monitoring program. And that monitoring program would be detailed in their mitigation, biological resource mitigation implementation and monitoring plan.

MR. ROHY: So rather than conduct a study, the decision was to conduct a monitoring program?

THE WITNESS: Yes.

MR. ROHY: Thank you.

MR. MOORE: I have one question for you that's along the same lines, and it goes to the height of the power lines. I'm curious as to why the height lowering diminishes the chances of collision. Seems to me that a height of 50 meters you have relatively infrequent flights by birds except very, very large birds that are in the flyways and things. But actually most of the flying taking place in the zone of 15, 20, 30 meters, and I'm wondering why diminishing height actually at least statistically decreases the chances for collision. I would have thought that higher would have decreased because it seems to me we've heard if not exactly the opposite, we've certainly heard testimony that would indicate the opposite, in the Sutter flyway case that just concluded.

THE WITNESS: It's, it depends on the setting. In this setting you have other high structures, buildings, industrial facilities, so if you're lowering that profile in relation to those other, they act as a kind of a screen, so to say. Birds approaching that would approach at a different angle, say if they were flying, overflying the area, so if you

lower that in relation to the other structures, tall structures in the area, that's going to reduce the potential for impact.

If you're out in a wildland situation then I believe you have the opposite problem, or situation.

MR. MOORE: Is this phenomenon fairly well documented in the literature?

THE WITNESS: Collision with transmission lines?

MR. MOORE: Height differentials and statistical chances of collision, is there a -- because I didn't see it in the material I saw, so I am asking you in general is this kind of thing documented in the literature --

THE WITNESS: Yes, it is. It is the height plus the design of the structure has a bearing on the potential for collision.

And, of course, the setting.

MR. MOORE: Mr. Ratliff, is it possible to -- I'm again in the structure of these hearings is it possible to ask for supplemental responses to that? I'd like to see the statistics and some of the references, so I can look at those myself.

MR. RATLIFF: Would it be acceptable if we just take what we are able to find and submit it to the record?

MR. MOORE: Yes.

MR. RATLIFF: Okay.

MR. MOORE: Thank you.

MR. THOMPSON: We will stipulate it's acceptable.

MS. GEFTER: Okay, we would like to have that by the end of testimony next Tuesday, if possible.

MR. MOORE: Yes, references are fine, I mean, if it's biologicala, volume XX, page so-and-so, that's fine. I'm fully capable of getting the references.

MS. GEFTER: Thank you. Any other questions from the committee?

I have a question regarding the BIO-7 which is a proposed condition that is regarding the possible streambed alteration agreement with the Department of Fish & Game; from your testimony previously indicated that this may not be necessary. Is this condition still relevant?

THE WITNESS: It's BIO-7?

MS. GEFTER: It's at page 331 of your testimony. It's BIO-7.

THE WITNESS: Yes. Again this focused primarily, I believe, on the Dowest slough alternative and the other aspects of the linears, as I understand it, will not be encroaching on streambeds, so this would not be necessary.

MS. GEFTER: It --

THE WITNESS: Would not be, there's no need for a permit if you're not encroaching on streambeds or altering.

MS. GEFTER: So would you continue to include this proposed condition or would you delete it?

THE WITNESS: I would delete it.

MS. GEFTER: And with respect to references throughout your testimony regarding potential wetland habitat degradation, if line 10-A were used, will, would you delete those references?

THE WITNESS: Delete the references to 10-A, yes.

MS. GEFTER: So it is your testimony that if line 10-A is not used there would be no impact to wetland habitat?

THE WITNESS: Yes, because they've proposed avoiding or protecting other potential wetland areas which were identified. That was the only one that was in question, 10-A.

MS. GEFTER: If it determined at some point that wetland habitat is crossed, by chance, what protection is there?

THE WITNESS: You mean --

MS. GEFTER: During --

THE WITNESS: -- crossed during --

MS. GEFTER: -- during construction, for example?

THE WITNESS: They, as I understand, there's no plan to do that.

MS. GEFTER: Okay --

THE WITNESS: Now you're saying if they were to change their project then I imagine they'd have to come back to us.

MS. GEFTER: All right.

THE WITNESS: And then that would initiate the need for section 404 compliance.

MS. GEFTER: All right. And the need for a streambed alteration plan, then, is that continues to be relevant or not?

THE WITNESS: It's not relevant because they're not crossing any streambeds.

MS. GEFTER: Okay, because there are references throughout your testimony to applying for a streambed alteration plan.

THE WITNESS: I think that is based partly on the number of alternatives that were potential for, you know, moving forward with. Seems as though some of those or quite a few of those are now not anywhere being considered.

MS. GEFTER: Okay, would it be appropriate to ask the witness to revise his testimony to correct or to correct it based on a modification to the project?

MR. RATLIFF: I think he just did orally. I think he recommended the deletion of that unnecessary condition.

MS. GEFTER: All right.

MR. ROHY: Is it just one condition that will be deleted?

THE WITNESS: BIO-7.

MR. ROHY: BIO-7?

MR. RATLIFF: All right, that's my understanding.

(Commission confers.)

MS. GEFTER: There's reference on page 329 to line 10-A and the loss of wetland habitat.

MR. RATLIFF: I would hope we could make these changes, let them stand on the record from the oral presentations rather than having to submit new writings; otherwise, I think it will get, it'll actually make things more confusing than rather than clearer.

MR. ROHY: Is the Applicant happy with that, or will they accept that decision?

MR. THOMPSON: Yes.

MS. GEFTER: Are there any other questions of the witness from the committee?

Okay, any redirect by staff?

MR. RATLIFF: No.

MS. GEFTER: Staff -- okay, then we are finished with the biological resources testimony.

(Witness excused.)

MS. GEFTER: We can go off the record now.

(Whereupon, a brief recess was taken.)

MS. GEFTER: Back on the record.

The next topic is the area of noise. Is the Applicant prepared to bring your witness forward?

MR. THOMPSON: We are.

MS. GEFTER: Okay, and who would that witness be?

MR. THOMPSON: Again Applicant would like to present Rob Greene, who has not been sworn.  
Whereupon,

ROB GREENE,  
having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Please state your name for the record?

A My name is Rob Greene and I'm a consulting scientist and manager of noise and vibration for URS-Greiner-Woodward-Clyde.

Q Thank you, and are you the same Rob Greene that submitted prepared testimony in this proceeding that's now contained in Exhibit 30?

A Yes, I am, sir.

Q And you are testifying to noise, am I correct that you are sponsoring Exhibits 1-5.12, Exhibit 2-NOI-1 and Exhibit 4 which is a revised response to noise data request?

A That is correct. My area of expertise is noise control and I am sponsoring those exhibits.

Q You have any corrections, additions or deletions to make to your material?

A Not to my material.

Q Have you reviewed the staff assessment?

A Yes, I have. As part of my responsibility I reviewed the staff assessment and the proposed conditions of certification. I have been in discussion with staff. There are some clarifications in the staff report and the conditions that we believe are appropriate for consistency, and I understand the staff will offer those changes during the testimony this afternoon.

Q Thank you. Would you please briefly summarize your noise testimony?

A Yes. In specifically we followed commission guidelines and caused to be conducted a baseline study of noise

on the facility property and in the surrounding residential communities. We also performed an engineering analysis of the potential noise effects from the project, and compared the existing noise levels with those potential noise levels from the project to determine if there would be anything of significance. Based on input from the public workshops and the staff, the project description was substantially revised and additional noise control measures were incorporated, and based on the incorporation of those measures, I believe we currently have a project defined that will not cause an adverse effect on the environment.

Q Thank you. Finally, you mentioned the conditions of certification as appear in the staff assessment. With that minor change that you believe that staff will put forward with their witness, would you recommend that the Pittsburgh District Energy Facility adopt and accept those conditions of certification?

A Yes, with the modifications as we've discussed, I would recommend that that be an acceptable method.

MR. THOMPSON: Thank you.

Mr. Greene is tendered for cross-examination.

MS. GEFTER: Staff, any cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Okay, does any other party have cross-examination of the witness?

Committee? Vice-chair Rohy.

MR. ROHY: Mr. Greene, you mentioned that you made modifications to the project as a result of input from perhaps citizens but specifically staff?

THE WITNESS: Yes.

MR. ROHY: Could you describe those modifications for us here today so that we understand exactly what they are for the project?

THE WITNESS: I can address several of the issues. The first change had to do with the number of decibels that would be allowed and the descriptor of noise, and once that change was agreed to, that required the plant then to emit a lower level of noise. So our task then was to design the plant by substituting equipment, modifying equipment or putting on shrouds and shields and enclosures, silencers, mufflers and so forth so that the noise output was going to be less than originally had been planned.

The two major areas would be the cooling tower, and in that case we, I'd been in discussion with the acoustical engineers from the cooling tower vendors, and that will be combination of fan speeds, cord dimensions and such that the cooling tower will put out less noise.

The other major contributor is made up of very many smaller parts and that would be the powerplant islands themselves, and those noise sources there would be the turbine, the heat recovery steam generators, various pumps and motors that are associated with the powerplant and generators. Those noisy pieces of equipment will be enclosed in some cases, they

will be shrouded and shielded. Certain piping will have extra insulation placed on it, such that the composite noise level from the power islands, when added to the noise level from the cooling tower, will meet our required noise levels at the nearest residential locations.

So there's a variety of engineering changes. Additionally, the plant was rotated 180 degrees so that the tower exhausts were farther away, placed farther away from the community as well. So there have been reorientations and modifications of the equipment to meet the standards.

MR. ROHY: Staff recommended a muffler on the pipe that is used for steam blows. Is that part of your mitigation measures?

THE WITNESS: Yes, in fact, that specific topic is one of those issues that staff and I have been discussing. There will be a silencer placed on the steam blow process to reduce noise to a level of 100 and not more than 110 decibels at a distance of 100 feet from the steam blow exist, which is the same condition that has been placed on similar projects very recently.

MR. ROHY: And have you incorporated inlet air silencers on your power islands?

THE WITNESS: The inlet air silencers will be evaluated and they will be incorporated if necessary to meet our standard, and more than likely there will be an inlet air silencer. The exact amount of insertion loss has not yet been determined.

MR. ROHY: All right. Thank you.

MS. GEFTER: You talk about the nearest residential sensitive receptor. How close is that to residents?

THE WITNESS: Approximately 1800 feet from the plant, and that would be on Harbor Street.

MS. GEFTER: And in doing your surveys, did you place a noise survey device at that residence?

THE WITNESS: Yes, we did.

MS. GEFTER: For how long?

THE WITNESS: The 25-hour requirement by the commission.

MS. GEFTER: And what is the noise level that the project is expected to meet at the nearest residence?

THE WITNESS: Specific requirement is not to exceed a level of 47 DBA, L-90, at the nearest residence, which is located approximately 1800 feet from the plant on Harbor Street, and I can explain some of those metrics if you'd like me to.

MS. GEFTER: Yes.

THE WITNESS: The numeric number, the 47, is a, is just a numeric value. The DB is decibels, and that's how we, those are the units of noise measurement. A indicates that the decibels are frequency-weighted to be similar to the way the human hearing mechanism hears noise and sound. The L-90, and that's a capital L with a subscript 90, L stands for level and 90 indicates that this is a statistical level exceeded 90 percent of the time, and that is generally believed to represent the background or ambient level of noise in a community.

So we are taking the most stringent time of just the background levels in the community and applying our conditions to that particular description. And so that will allow us to be a good neighbor, if you will, during the nighttime hours as well as during the noisier daytime hours, it, and --

MS. GEFTER: The level of 47 DBA, is that 24 hours a day or is that only during the evening?

THE WITNESS: That's 24 hours, not to exceed that level at any time.

MS. GEFTER: At any time.

MR. ROHY: Excuse me, Ms. Gefter --

MS. GEFTER: Yes, go ahead.

MR. ROHY: -- when you say at any time, does that include during steam blows?

THE WITNESS: I should correct that; at any time during normal plant operation, I believe, is what is --

MR. ROHY: Thank you.

THE WITNESS: -- the words. Thank you for that clarification, sir.

MS. GEFTER: Is that also during construction?

THE WITNESS: That is not specifically during construction. The construction may exceed that level on occasion. However, construction is temporary in nature and limited in nature, both physically as well as temporally, so that we will have a limited period of construction, but also construction activities would tend to move from place to place

and would not impact a particular location for any lengthy period of time.

MS. GEFTER: Okay, we -- from testimony there will be a soundwall built along the truck bypass road?

THE WITNESS: That's correct.

MS. GEFTER: Okay, and how tall is that soundwall?

THE WITNESS: That's between, believe, it's 10 to 12 feet. I would have to check with -- 12 feet, approximately. 12 feet --

MS. GEFTER: 12 feet?

THE WITNESS: -- high, yes.

MS. GEFTER: And what material is it constructed out of?

THE WITNESS: There are several alternatives being discussed with significant input from the community. I believe there's been a committee established to, in fact, to put in a wall that everyone can agree or at least the consensus can be reached that it's the appropriate method. So the materials are still somewhat open. I know the recommendations have been made for what's called a living soundwall, perhaps a berm-type landscaped wall, and that's something that's being discussed. It could also take the form of a screenwall. It really depends on community input and what will fit.

MS. GEFTER: Well, isn't there an attempt to bring the noise level down, and to what would be the level at that point where the soundwall is?

THE WITNESS: The soundwall of that height would provide approximately 10 decibels or better of attenuation. It's going to change a little depending on the geometry, but the materials of the soundwall are quite broad in terms of meeting the acoustic criteria. And so that can range from masonry, brick, lumber, glass, lexan, earth and so forth.

So there's quite a broad range of materials that can be used in --

MS. GEFTER: Is there a standard, though, that you're trying to accomplish, you know, in terms of sound attenuation?

THE WITNESS: If I might take a minute.

In general we are trying to maintain the limit imposed by the general plan to get noise levels below a 60-decibel level, and that would be the goal of the soundwall.

MS. GEFTER: Okay, is there any -- are there any other questions from the committee of the witness?

Any redirect by the Applicant?

MR. THOMPSON: Just one.

#### REDIRECT EXAMINATION

BY MR. THOMPSON:

Q Mr. Greene, in talking about the soundwall, this would help alleviate sound that already exists at that location, would it not?

A That's correct. The soundwall has two purposes, essentially to reduce to some degree noise levels that are currently affecting residences from traffic, truck traffic, and other types of traffic in the area. And when it is in place and

the bypass road is constructed, the soundwall will act in some respects to reduce noise from the plant, but more importantly, to reduce noise from the truck traffic that's closer and would have more effect on residences.

So its primary goal is to reduce the noise from traffic.

Q Mr. Greene, would it help reduce the noise from trains on the other -- that will be on the other side of that wall?

A Any noise source that's on the other side of the wall from the affected residences would be reduced to some degree.

MR. THOMPSON: Okay, thank you.

That's all we have.

MS. GEFTER: From your testimony I understand that the sound on the other side, on the residential side of the wall, will then be reduced approximately 10 decibels, is that what your -- is that what the aim is?

THE WITNESS: It will change depending on the particular source, but for in general for a truck we would expect to have approximately a 10-decibel decrease in noise with the wall in place versus a truck going by without the wall in place.

MS. GEFTER: Is 10 decibels a large decrease?

THE WITNESS: That's a substantial improvement, and is generally considered to be at or slightly more than cutting sound in half, you know, that's a lot.

MS. GEFTER: That's a very interesting analogy, then, so that's how you would characterize that?

THE WITNESS: We -- the perception of a 10-decibel decrease would be about cutting things in half in terms of noise.

MS. GEFTER: Okay, thank you.

Any other questions?

(Witness excused.)

MS. GEFTER: Okay, is staff prepared to bring your witness on noise?

MR. RATLIFF: Yes, the staff witness is Steve Baker.

MR. THOMPSON: May I move the Exhibit 4 into evidence, please? Exhibit 4 is the revised response to noise data request, dated 10/7/99 (sic).

MS. GEFTER: Yes, any objection to Exhibit 4 being moved into evidence from staff.

MR. RATLIFF: No.

MS. GEFTER: No objection. Hearing no objection, Exhibit 4 is now admitted into evidence.

MR. THOMPSON: Thank you.

MS. GEFTER: Thank you.

(The document referred to,  
having previously been marked  
for identification as  
Exhibit 4, was  
received in evidence.)

MR. RATLIFF: Mr. Baker, did you prepare the  
staff --

MS. GEFTER: Wait, wait, I'm sorry. Mr. Baker needs to be sworn.

MR. RATLIFF: He's been sworn.

MS. GEFTER: Oh, that's right, he's from yesterday, thank you.  
Whereupon,

STEVE BAKER,  
having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. Baker, did you prepare the staff testimony that appears in the staff assessment titled Noise?

A Yes, I did.

Q And that's Exhibit 28. Did you prepare the one-page portion, the supplemental testimony, Exhibit 29, that is also under that title?

A Yes, I did.

Q Is that testimony true and correct to the best of your knowledge and belief?

A With some additions that I'd like to make at this time, yes.

Q Okay, could you explain those additions?

THE REPORTER: That's a recording mike, it will not amplify. Please place it in front of you.

THE WITNESS: Thank you.

MS. GEFTER: I'm sorry, just a point of clarification. Are these modifications to your supplemental testimony or to the original testimony?

THE WITNESS: I'd like to make some more clarifications to the original testimony, in addition to the ones that have already been published as supplemental.

On page 176 of my original testimony under the heading Proposed Mitigation in the second paragraph, the fourth line, change the term "LEQ" to L-90.

Also on page 176, delete footnote no. 4.

On Page 179, condition of certification, noise, for, move the word "verification" to page 180. It belongs at the beginning of the paragraph that starts underneath the noise complaint resolution form.

Also on page 179, noise, for, in the third line, change the figure 100 DBA to 110 DBA.

On page 181, in condition, noise, six, in the eighth line after the sentence that completes noise that draws complaints, add the following new sentence: "The noise contributed by the PDEF operations at the nearest noise-sensitive use located on Harbor Street at a distance of 1800 feet from the plant shall not exceed 47 DBA, L-90, under normal operating conditions."

Continuing in the next sentence, if the results from the survey indicate that, strike the words "operation of the powerplant", strike the word "causes" noise levels, add the word "are" in excess of 47 DBA, change LEQ to L-90.

Then at the end of that paragraph, add a new paragraph labelled Protocol, the measurement of powerplant noise for purposes of demonstrating compliance with this condition of certification may alternatively be made at a location acceptable to the CPM closer to the plant, e.g., 400 feet from the plant boundary, and this measured level then mathematically extrapolated to determine the plant noise contribution at the nearest residence.

However, notwithstanding the use of this alternative method for determining the noise level, the character of plant noise shall be evaluated at the nearest residence to determine the presence of pure tones or other dominant sources of plant noise.

That completes my additions to the testimony.

BY MR. RATLIFF:

Q Could you summarize your testimony?

A Yes. Noise is created by both construction and the subsequent operation of any powerplant. Excessive noise can annoy the facility's neighbors and endanger the health and safety of workers at the facility. Chief concerns are that the noise produced by the project complies with all applicable legal limits, and that it does not represent a source of significant annoyance to the project's neighbors.

Federal and state laws are in place to protect workers at the project from noise-related safety hazards and adverse health effects. Local laws, in conjunction with the California Environmental Quality Act, serve to protect neighbors of the project from adverse effects due to noise. Applicable local

laws are the City of Pittsburg noise ordinance and the general plan noise elements of the City of Pittsburg, the city of Antioch and Contra costa County. These laws limit the volume of noise that a source may deliver to nearby receptors and the hours of the day during which it may do so.

Construction of the powerplant and its linear facilities, including the electrical interconnection line, the natural gas, water supply and water disposal pipelines and the truck bypass route will create noise. The amount of this noise and the hours of day during which it's produced will be controlled under the applicable laws, ordinances, regulations and standards. And compliance will be ensured through adoption and implementation of staff's proposed conditions of certification noise-1, -2, -4, -5 and -8.

Once the project is completed, the linear facilities will be effectively silent, but the powerplant itself will produce noise, as will the truck bypass route. The powerplant will be built with adequate mitigation measures, such as physical enclosures around noisy equipment, soundwalls and earth berms to --

MS. GEFTER: Excuse me, I wonder if Mr. Baker could use another mike so that we could also hear him, because it's a little hard to hear him. We have no other mike here?

MR. MOORE: No, I hear him okay.

MS. GEFTER: The people behind. Steve, can you speak louder, please.

THE WITNESS: Okay. The powerplant will be built with adequate mitigation measures such as physical enclosures around noisy equipment, soundwalls and earth berms to limit noise levels at nearby sensitive receptors, chiefly residences. The truck bypass route will incorporate a soundwall 10 to 12 feet high to protect nearby residences from excessive noise. Compliance with these limits will be ensured through adoption and implementation of staff's proposed condition of certification noise-1, -2, and -6.

Construction workers and workers at the completed facility will be protected from excessive noise by use of adequately muffled construction equipment and through employment of a worker hearing protection program. Compliance with these restrictions will be ensured through adoption and implementation of staff's proposed conditions of certification noise-3 and -7.

In conclusion, with the adoption of staff's proposed conditions of certification, the Pittsburg project will comply with all applicable noise laws, ordinances, regulations and standards and will create no significant adverse noise impacts on the surrounding community, nor will its workers be subjected to excessive noise.

BY MR. RATLIFF:

Q Did the Applicant change the project to reduce the amount of noise after they filed their application?

A Yes, you heard a description of those changes from the previous witness.

Q And why did we request those changes?

A The original proposal appeared to comply with the applicable local laws and ordinances, but in my view it did not comply with the CEQA, the California Environmental Quality Act, requirement to visit no significant adverse impacts upon the receptors. The proposed noise levels at the nearest residence would have created an increase in noise level considerably greater than the five-decibel criterion which we consider applicable in this case.

Q And with the changes that staff recommended, that would not be the case?

A With the recommended changes, the increase in noise level at the nearest residence should be less than five decibels.

Q Does that conclude your testimony?

A Yes, it does.

MR. RATLIFF: I -- the witness is available for questioning.

MS. GEFTER: The Applicant have any cross-examination of this witness?

MR. THOMPSON: No, thank you very much.

MS. GEFTER: Any of the other parties have any cross-examination?

Committee?

I have a few questions for Mr. Baker.

On page 176 there's a reference to a figure 5.12-2, the powerplant operational noise map. Could either you or the Applicant indicate where we can find this map?

THE WITNESS: Okay, this was included in the Applicant's supplement to the application for certification, dated December 7th, 1998. It appears following page 5.12-6.

MS. GEFTER: Okay, and is this the map that you used to make your analysis, is this the map that will be used in terms of the conditions?

THE WITNESS: Yes.

MS. GEFTER: That are being recommended?

THE WITNESS: Yes, this was one of the pieces of material that I used in performing my analysis.

MS. GEFTER: All right. Perhaps you could explain where you're in the same paragraph on page 176 you state that the new noise level of 49 DBA would result from the powerplant running 24 hours a day and this would then be a nighttime noise level. And the Applicant's witness told us that the noise level at the nearest residence would not exceed 47 DBA. Is there a difference or is this just --

THE WITNESS: No, the Applicant's witness was correct. He explained that with the mitigation measures proposed the noise from the powerplant perceived at the nearest residence will not exceed 47 DBA, and that's what's intended here and that's what will be implemented.

Okay, the current ambient noise level, the lowest L-90 at night at the nearest residence is currently measured at 45 DBA. When you add the 47 DBA contribution from the powerplant to the existing 45 DBA ambient noise level, you get 49 DBA, which is only four DBA greater than the existing ambient 45.

These noise levels are -- the arithmetic is done on an -- on a logarithmic scale, which is very different from anything in nature, it's not at all intuitive, believe me.

MR. MOORE: So you're saying that the results are presented --

THE REPORTER: Sir, your mike's not on.

MR. MOORE: You're saying that your results are presented, all the results are presented in log scale instead of just arithmetic scale, so that's --

THE WITNESS: Yes, sir. Whenever someone starts talking decibels of noise it's always logarithmic.

MR. MOORE: I'm just doing this for the record; log base 10?

THE WITNESS: Yes, sir.

MR. MOORE: And as opposed to an arithmetic scale, fine. Then it's -- I know there were some frowns going on about how you could go from 47, 48 and only be four and still be four different, like --

MS. GEFTER: Okay.

MR. MOORE: -- understood.

THE WITNESS: Just to point out at the back of my testimony beginning on page 185 there's a helpful little appendix, noise appendix A, which explains some of these little details.

MS. GEFTER: Thank you. At page 174, the paragraph right above linear facilities, there is discussion about an alternative steam blow process referred to as quiet blow or

silent steam, which method would use a lower-pressure steam and would be less noisy. What is the status of that process? Is the Applicant going to be using that process?

THE WITNESS: I don't know the Applicant's intentions. This process was used by SMUD on their Proctor & Gamble and their Campbell cogeneration projects, and I understand they were quite satisfied with the work.

MR. ROHY: However, the staff's recommendation as I understand it is to in some way muffle the sound from the steam; is that correct?

THE WITNESS: Staff's recommendation is if the noisy process is used, to muffle it; if the quiet blow or silent steam or equivalent process is used, there's no need for extra muffling because the process itself is inherently muffled.

MR. ROHY: So is the staff recommendation that either is acceptable?

THE WITNESS: Yes, sir, with the proposed conditions of certification, staff views either process as acceptable.

MR. ROHY: Thank you.

MS. GEFTER: And also had a question regarding the hours for construction and the hours for -- at page 173, it seems that there are several different time frames for construction and for steam blow and could you go over that, please, for the committee?

At page 173, third paragraph.

THE WITNESS: The notation that general construction activities will be performed between the hours of 6:00 AM and

6:00 PM, I believe, came from the application. The restriction on noisy construction between the hours of 10:00 PM and 7:00 AM comes from the applicable laws.

MS. GEFTER: Okay, so general construction is not considered noisy construction, is that --

THE WITNESS: Yes, it is. I was citing what the Applicant intends as expressed in the application, and then I've followed it by the restrictions imposed by the applicable laws.

MS. GEFTER: Would that mean then that the construction activities cannot begin until 7:00 AM, rather than 6:00 AM?

THE WITNESS: Well, noisy construction, yes, noisy construction is that which is noisy enough to cause a problem.

MR. MOORE: In other words, you could have delivery trucks coming in, now we're trying to be logical about this, noisy construction is actual construction activities. You can have people arriving on the scene before 7:00 o'clock, you just can't fire up your D-9 tractor and move things around. Logic, right?

THE WITNESS: Yes, sir, as long as it's not noisy enough to bother nearby residents.

MR. MOORE: And what happens if it bothers nearby residents? They can complain?

THE WITNESS: Yes, sir, that triggers condition noise-  
2.

MR. MOORE: And seek relief?

THE WITNESS: Yes, sir.

MR. MOORE: Thank you.

MS. GEFTER: There's also a comment in your testimony regarding simultaneous construction activities of the linear facilities along with the delta energy center, and at this point the staff's analysis believes that is too speculative to determine whether there are cumulative impacts. Is there -- that's what your testimony states -- it's at 177.

It's under cumulative impacts, yes. So what about the time that the Eighth Street undergrounding of the transmission line will be occurring at the same time? So that --

THE WITNESS: Yes, but it's unlikely that you'll have two crews working on top --

MS. GEFTER: Yes --

THE WITNESS: -- of each other --

MS. GEFTER: -- right.

THE WITNESS: -- in the same area at the same time.

MS. GEFTER: Right.

THE WITNESS: It's my expectation that there won't be enough work going on at any one spot that it would be cumulatively growing due to the two projects --

MS. GEFTER: Right.

THE WITNESS: -- being built at similar time.

MS. GEFTER: Okay, are there any other questions of the witness?

Okay, is there any redirect by staff?

MR. RATLIFF: No.

(Witness excused.)

MS. GEFTER: The next topic is visual resources.

Before we get to visual resources, were there any public comments on noise?

Okay, thank you. We can continue with visual resources.

MR. THOMPSON: Thank you. Applicant has three witnesses, actually, to call. Mr. Larry Headley, followed by Mr. Sam Wehn, followed by Mr. Joe Patch. Applicant would first like to call Mr. Larry Headley, who has not been sworn. Whereupon,

LARRY HEADLEY,  
having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Would you state your name for the record?

A Larry Headley.

Q And are you the same Larry Headley that submitted prepared testimony that is now contained in Exhibit 30 to this proceeding?

A I am.

Q You have any corrections, additions or deletions to make to your material?

A I do not.

Q You are, am I correct that you sponsoring Exhibit 1, section 1-5.13, visual resources, and Exhibit 2, 2-VIS-1, which

is our response to staff data request visual-1 regarding a discrepancy in the AFC?

A You are correct.

Q Would you please summarize your visual testimony, please?

A Yes. Can you hear me okay?

MR. THOMPSON: Okay, that's not a sound mike.

MR. MOORE: You have to speak up, just --

THE WITNESS: Okay, fine. The visual resources assessment for the AFC and supplement to the AFC were conducted in conformance with CEC guidelines for preparing visual impact assessments for such AFCs. The existing environment was characterized in two steps.

First, sensitive public views that would include project facilities were identified. Sensitivity was estimated using guidelines primarily drawn from concepts and methods of visual analysis used by several federal agencies. The sensitivity analyses led to an identification of the views that were the most critical with respect to the visual resources assessment.

Second, the character and quality of these critical views was evaluated as a baseline for visual impact analyses conducted later. Panoramic photographs taken both from a helicopter and from the ground during the initial site visit in April of 1998 -- I'm sorry, those photographs were taken from the air and the ground.

These photographs served to document the character of the potentially affected sensitive public views. The assessment of visual impacts was directed towards critical views of the powerplant, transmission line routes and the truck bypass road. From a preliminary assessment of the construction and operation of offsite pipelines, it was determined that there would be no potential for significant visual impacts due to these project features. The routes either would not be within public views, or if they would be, the visual impacts of construction and operations would be temporary.

The range of critical views was considered, and several representative views in which the proposed facilities would be most noticeable were selected for detailed analysis to aid the public in understanding the degree to which the project would be visible; photosimulations were prepared by the project engineers and presented in the AFC and the supplement to the AFC.

These consisted of three-dimensional computer models of the project facilities superimposed on photographs representing the critical views. My assessment of the magnitude and significance of visual impacts was based partly on these simulations. Criteria for magnitude and significance of visual impacts included how noticeable the impact would be, the sensitivity of the potentially affected views, the duration of the impact, and whether or not the impact would be consistent with laws, ordinances, regulations and standards to the protection of visual resources.

My conclusions are as follows. I'll keep this brief. The powerplant and the transmission line structures, particularly the powerplant are, would be situated well within lands zoned for industrial development, but also lands which are currently characterized by industrial facilities. The character type is industrial, the powerplant is congruent with that character type, as would be those transmission line structures which are, would be seen against a backdrop of the industrialized nature of the lands affected.

Therefore, based upon my methodology, there wouldn't be an adverse impact, let alone a significant impact.

Concerning the truck bypass road, the soundwall, the 12 -- I did my analysis based upon a 12-foot soundwall. It would block the current views of a railroad siding, in my experience of several site visits railroad cars are parked there. There are industrial facilities in the distance, as well as in the middle ground, and this wall would block the views of those industrial facilities.

The original proposal called for a greenbelt along the wall, and in my estimation at that time, the wall together with the greenbelt provided a net improvement in the visual quality, if one just looked at the wall as it was to be constructed.

Concerning consistency with laws, ordinances and regulations, in my opinion the project is in conformance with all such laws which I determined to be relevant to the PDEF.

MR. THOMPSON: Thank you, Mr. Headley.

BY MR. THOMPSON:

Q Although the resume that we sent in for you did not indicate that, you have substantial experience in powerplant applications, do you not?

A Yes, I do. I have been involved with five such applications.

MR. THOMPSON: Great. Thank you very much.

We tender Mr. Headley for cross-examination.

MS. GEFTER: Does staff have cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does any other party have cross-examination of the witness?

Committee?

MR. ROHY: My question deals with the powerplant stacks, and I'm not sure if you're the correct witness, and you can tell me if you're not. But I believe you said that from a visual point of view that the powerplant meets all laws, ordinances, regulations and standards; is that correct?

THE WITNESS: The ones that I deemed to be applicable to this project. I found them to be compliant.

MR. ROHY: There was --

THE WITNESS: To which would you be referring?

MR. ROHY: Excuse me. There was some indication that a variance may be needed for the stack height.

THE WITNESS: I would not be the witness to answer that question.

MR. ROHY: Thank you.

MR. MOORE: I have a question about the wall that you've indicated would be built next to the greenbelt corridor, and I'm wondering if you think it would be advisable and would you support a mitigation measure that would require that wall to be painted with a material that resists graffiti or could be cleaned up. Have a lot of experience in New York city and some other big cities about different kinds of paints, and one of the things that clearly can offer a future visual impact is the presence of graffiti. I'm very interested in whatever we do, protecting the neighborhood.

And I'm wondering if you think that would be an advisable and supportable mitigation?

THE WITNESS: CEC staff raised the issue of graffiti. It's a point well taken. I did not consider that. It wasn't a part of the project but it is a point well taken. Yes, if there is such a material, I would recommend using it. I'd also like to know about it for my neighborhood, but there were some other proposals advanced that would screen that wall as well. I would supportive of those measures as -- too.

MR. MOORE: Thank you.

MS. GEFTER: Does the Applicant have any more redirect questions of this witness?

MR. THOMPSON: We do not. Thank you.

MS. GEFTER: Okay, there any public comment on the issue of visual?

(Witness excused.)

MS. GEFTER: Okay, let's go on to staff and ask staff to bring in your witness on visual resources.

MR. THOMPSON: Would you like our -- the remainder of our witnesses?

MS. GEFTER: Oh, sorry, I'm sorry.

MR. THOMPSON: Let me -- we would like to call Mr. Sam Wehn, having previously been sworn. Whereupon,

SAM WEHN,  
having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:  
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DIRECT EXAMINATION

BY MR. THOMPSON:

Q Mr. Wehn, would you please identify yourself for the record?

A Yes, I'm Samuel Wehn, project manager for the Pittsburgh District Energy Facility.

Q And you're the same Sam Wehn that testified yesterday?

A Yes, I am.

Q And you are testifying today on the subject of visual resources, and here to sponsor Exhibit 2-VISUAL-10; is that correct?

A That's correct.

Q And that exhibit is a response to a staff data request regarding shrubbery along the soundwall?

A Yes.

Q In response to a question asked previously, what is the height of the soundwall?

A 12 feet.

Q Thank you, and would you please summarize the efforts of Enron, PDEF and the citizens group with regard to shrubbery or other treatment of the soundwall?

A Yes, I will. The soundwall became a very big issue in the community, and one of the -- as far as a visual concern to the community, and visual with respect to graffiti, visual with respect to just the pleasant view that they would have from the central addition.

We formed the powerplant advisory committee and one of the main purposes of that committee was to provide input to the design of this soundwall. We certainly wanted it to take, have in a -- two effects, positive effects to the community. One is attenuate the noise from the industrial area, and secondly, have a pleasing front that could be viewed by the residents.

We are meeting, we have met once a month since January. This is the powerplant advisory committee. They have not arrived at a specific design for that wall. We are working with them diligently to try to meet all of their expectations, as well as meeting the expectation of our commitments to the -- in our application.

I will, as soon as the -- I think one of the conditions in the final staff assessment was for us to arrive at a conclusion and then present that to the California Energy Commission, and we are prepared to do that. My expectation,

it's going to take another two months before we actually get a conclusion out of that committee.

Q Mr. Wehn, can you give the committee, the CEC committee, an idea of the things that the citizens group is looking at as far as the soundwall, things that they are considering?

A I, well, I think they considered a number of designs, concrete designs as well as we had discussed a berm. We've discounted the berm as not an acceptable solution. They're looking for ways to prevent graffiti, that's one of the major items that we're talking about, and looking for alternatives. And I think some members of the committee are out looking at other communities and trying to investigate ways that we can ensure that we don't have graffiti on the wall.

Q Thank you. While I've got you up here, Commissioner Moore (sic) asked a question regarding the stacks and the possibility that a variance may be required for the height of the stacks. Are you the right person to ask that question?

A I believe so.

Q And what has the PDEF done with regard to the height of the stacks and the height variance?

A We started our analysis on our original application with a 175-foot stack. We reanalyzed it because of concerns and questions coming from the visual effects in the community, and we, when we reanalyzed, remodelled, we ended up reducing the stack height to 150 feet.

And currently we filed on April 21st our variance application with the City of Pittsburg, and that is currently being evaluated by the planning commission staff. We will have a workshop with the planning commission, a date to be determined, and expectation is sometime in June after the presiding member's report is published, they will vote on the height variance.

MR. THOMPSON: Thank you very much.

Mr. Wehn is tendered for cross-examination.

MS. GEFTER: Does staff have any cross-examination?

MR. RATLIFF: No.

MS. GEFTER: Does any other party have cross-examination?

Committee?

MR. MOORE: No.

MS. GEFTER: Okay, any member of the public?

All right. This witness is excused.

(Witness excused.)

MS. GEFTER: And you can bring your next witness forward.

MR. THOMPSON: Thank you. Our final witness in the visual area is Mr. Joe Patch. Mr. Patch has been previously sworn.

Whereupon,

JOE PATCH,

having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Please state your name for the record?

A Joe Patch.

Q Are you the same Joe Patch that testified in this proceeding only yesterday?

A Yes, I am.

Q And today you are here testifying in area of visual resources?

A Yes, I am.

Q And am I correct that you are here to sponsor responses to data requests in the visual area, 2, 3, 4, 5, 6, 7, 8, 9, 1-A, 2-A, 3-A, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A and Exhibits 11, transmission interconnection drawings; 13, transmission pole simulations; 18, photosimulation of the plant; and Exhibit 26, the 115-KV line photosimulation?

A Yes, I am.

Q Do you have any corrections, additions or deletions to make to your material?

A No, I do not.

Q Would you please briefly summarize your testimony in the visual area?

A The simulations that have just been described look at various aspects of the facility. The plant itself was modelled. It is a 3-D autocad model that was rendered. For most of simulations what had happened is we have inserted either the plant itself and/or a portion of the plant. In a number of

cases a typical transition line pole, 75 foot high, the transition structures going from above ground to underground has been issues that we've addressed recently and photosimulated.

That's what they are.

Q Thank you. Does that complete your material?

A Yes, it is.

MR. THOMPSON: Mr. Patch is tendered for cross-examination in the visual area.

MS. GEFTER: Staff have any cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Do any of the other parties have cross-examination?

Committee?

I have one question regarding pole height which apparently is now reduced to 75 feet; is that correct?

THE WITNESS: Right.

MS. GEFTER: Does that require more poles to be built due to the shorter span length between -- when you have a lower pole you have shorter span length?

THE WITNESS: Yes.

MS. GEFTER: So how will that impact visual resources if you have more poles even if they're shorter at 75 feet?

THE WITNESS: What I believe the visual simulations show, both on the east side coming from the plant to Harbor and Eighth, as well as on the west side as we transition and go above ground on the northwest corner of the Delta Diablo pump

lift station, is that the shorter poles drop out of sight earlier and you only see the first initial pole. so the addition of one pole on the east side, two on the west side, visually are not discernible.

MS. GEFTER: Thank you.

Are there any other questions of the witness?

Any redirect by the Applicant?

MR. THOMPSON: None.

MS. GEFTER: Okay, the witness is excused.

(Witness excused.)

MR. THOMPSON: Thank you very much. Applicant would like to move Exhibits, 11, 13, 18 and 26 into evidence.

MS. GEFTER: Staff have any objection to those exhibits?

MR. RATLIFF: No.

MS. GEFTER: Does any other party have objection?

Then Exhibits 11, 13, 18 and 26 are now admitted into the record.

(The documents referred to,  
having been previously marked  
for identification as  
Applicant's Exhibits 11, 13,  
18 and 26, were received in  
evidence.)

MR. THOMPSON: The other exhibits sponsored by our visual witnesses are part of Exhibit 1 and 2 which I will move at the tail end.

MS. GEFTER: Thank you.

MR. THOMPSON: That completes our presentation.

MS. GEFTER: Okay, staff, do you have your witness ready?

MR. RATLIFF: Staff witness is Gary Walker.

MS. GEFTER: Thank you.

I'm sorry, yes, before the witness testifies we're going to take a break, okay, thank you.

(Whereupon, a brief recess was taken.)

MS. GEFTER: Back on the record.

Yes?

MR. THOMPSON: Thank you. I believe that I failed to ask any of our visual resource witnesses if they recommend that the project accept the conditions of certification contained in the staff AFC, and they do, and I will present a PDEF policy witness such as Mr. Wehn at the end to adopt all of the conditions of certification, but I wanted the record to reflect that Applicant agrees with staff's conditions of certification and verification thereto.

MS. GEFTER: Thank you.

Staff ready to begin with Mr. Walker?

MR. RATLIFF: The staff witness is Mr. Walker. He hasn't been sworn yet.

Whereupon,

GARY WALKER,

having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. Walker, did you prepare the staff testimony in the staff assessment titled Visual Resources?

A Yes.

Q That's in Exhibit 28?

MR. MOORE: Your microphone is for recording only.  
You're going to have to just speak up to us.

THE WITNESS: Yes, I did prepare that.

BY MR. RATLIFF:

Q And did you prepare the supplemental testimony of the same title which is Exhibit 29?

A Yes.

Q Do you have any changes to make in those pieces of testimony at this time?

A No.

Q Could you summarize your testimony briefly for us?

A Yes. I evaluated the project's conformity with applicable laws, ordinances, standards and regulations, and standards of the City of Pittsburg, the City of Antioch and Contra Costa County. Of particular concern were the policies of the City of Pittsburg regarding the need for buffers between industrial and residential land uses.

I also evaluated the potential for the project to cause significant environmental visual impacts. I used the significance criteria in the California Environmental Quality Act and guidelines.

for information I used the application, the supplement, data responses, workshops, site visits, local planning documents, and statements by representatives of local governments to prepare my analysis.

The visual impact of the powerplant would not be significant. It would be seen in the context of large existing industrial facilities. The proposed soundwall would block views from the south, the residential area, and landscaping now proposed would block views from the residential area to the southwest.

The visual impact of the cooling tower plume would not be significant. Existing facilities would cause larger plumes and do cause larger plumes, and again the plumes would be in an existing industrial context.

The two most important issues regarding visual resources for the project were the visual impacts in conformity with local policies related to the proposed electric transition stations and the transmission poles near the east end of Eighth Street and the west end of eighth Street, Pittsburg. The Applicant addressed staff's concerns by proposing to lower the transmission pole height from 150 feet to 75 feet and to install landscaping the screen the transition stations from sensitive public views.

With satisfactory implementation staff's proposed conditions of certification, I expect the project would not cause any significant visual impacts and would conform to applicable laws, ordinances, regulations and standards.

In regard to the conditions, there are 10 conditions. The first is to color the project to harmonize with existing setting. The second is to use nonreflective fencing. Third is to minimize lighting. The fourth is to treat the soundwall and adjacent strips, land strips, to minimize visual impacts. In the testimony I specifically mention the potential for graffiti as a problem. I've left the condition wording general to allow for flexibility for recommendations from the powerplant advisory committee. The condition does require the Applicant when they submit their plan to demonstrate input from the committee and the City of Pittsburgh.

Condition 5 requires the Applicant to screen refuse storage areas for the City of Pittsburgh zoning ordinance. Condition 6 requires the Applicant to maintain the site for litter and other such, per the City of Pittsburgh zoning ordinance. Condition 7 requires the Applicant to landscape or restore landscaping regarding the fuel gas pipeline for the City of Antioch.

Condition 8 requires landscaping along the eastern side of Harbor Street to screen the eastern electric transition station, per the City of Pittsburgh's general plan policies. Condition 9 requires a landscaping along the railroad easement north of the west end of Eight Street to screen the western electric transition station from residential areas. And condition 10 requires the transmission poles be no taller than 75 feet, as proposed by the Applicant, and these shorter poles, even though it would require one more pole on the eastern end

and two more poles in the west, these shorter poles would cause less impact because they're more in keeping with other existing poles and it would -- the poles closest to residences now would be substantially smaller and they would have been taller than other appearing industrial facilities.

That concludes my summary.

Q Did you have concerns about the visual impact of project as it was originally proposed?

A Yes, I did, as particularly for those transition stations and the close poles.

Q What changes were made to reduce the impact to less than significant?

A The, as I mentioned, the landscaping along Harbor Street and the landscaping along the railroad easement on the west end to reduce visibility from residential areas, and also relocation of the western transition station to the north side of the Contra Costa pumping -- I mean, excuse me, Delta Diablo pumping station, and the shortening of the pole to 75 feet.

Q Okay, does that conclude --

A Yes.

Q -- testimony?

MR. RATLIFF: The witness is available for questioning.

MS. GEFTER: Does Applicant have any cross-examination?

MR. THOMPSON: We do not. Thank you.

MS. GEFTER: Committee?

MR. MOORE: Go ahead.

MR. ROHY: Sir, you mentioned that the fencing should be nonreflective in nature. My question is concerning the power line poles, will they also be nonreflective?

THE WITNESS: Yes, that would be part of the color plan that would be submitted. We would require that the flat surface, flat finish, be applied to the poles as well.

MR. ROHY: Thank you.

MR. MOORE: Gary, I understand you backed off on your original recommendation that the Stealth 111-A paint be used on all metal structures? That no longer --

THE WITNESS: It's not heat-resistant.

(Laughter.)

MR. MOORE: I just happened to see that. Gary, nice job on comparing a difficult set of disparate regulations. It's one of the tougher things that you have to do is blend the regulations of a lot of neighboring but often with differing objectives, cities, so nice job in doing that. I appreciate it.

And let me just ask you a question. How can we link up what you've suggested in terms of landscaping with testimony that will follow for long-term maintenance? One of the difficulties that any municipality has when they put in any kind of landscaping improvement plan, whether it's a park, whether it's a median strip, whether it's a greenbelt of some kind, is making sure that there is something other than the general fund which gets raided pretty regularly for expenditures, something that's dedicated to make sure that the landscaping is kept up.

The Applicant makes a contribution, they go out and buy a zillion dollars worth of plants to put in, and what happens if the city can't afford to keep them up? Should we consider a sinking fund of some kind, an enterprise fund, some other funding mechanism that would be tied in to make sure that this condition is kept up in the long term and that the city and the Applicant are both served by it?

THE WITNESS: My understanding from conversations with the city is that they intend to take over the landscaping that will be planted along Harbor Street, and I'm not sure about the landscaping on the west end. They didn't raise a question or a concern about the financing of that landscaping, but it, your suggestion, may be relevant, and I haven't considered that.

MR. MOORE: Okay, well, and it's not necessarily in your area. What I'm trying to do is as we go through these cases to start to successfully weave a little bit tighter net, because what you do, what you propose, is in the long run not going to be valuable to us if we can't afford to finance it, and frankly doesn't serve anyone if we don't think out that linkage.

So I'm just raising in the blue and it'll come up again. But what you do, what you d\propose, is inexorably linked to the fisc, the public fisc, and I want to make sure that those two are meshed and accountable.

THE WITNESS: Yes, I think the maintenance of the greenbelts near the soundwalls would actually be a larger expenditure. That should be taken in consideration.

MR. MOORE: Some of this may turn out to be nontrivial, and so that there's a reason to think about them today. If what Mr. Walker has proposed is reasonable and is the right thing to do, and I happen to think that it is, then we got to think about how to pay for it.

Thank you.

THE WITNESS: Thank you.

MS. GEFTER: I have a question about some of these photosimulations which were provided by Patch for the Applicant but they were included in your testimony. Regarding, it's KOP-7, figure 10-M, which appears in your supplemental testimony, and then you -- there're also two simulations of this particular spot that appeared in your original testimony, and it was figure 10-A and 10-B from your original testimony.

And I -- in your -- in figure 10-M it shows landscaping which seems to camouflage the facility. Could you describe this location? Is this a house, first of all?

THE WITNESS: Where the photo was taken?

MS. GEFTER: Yes.

THE WITNESS: The photo was taken from the street right, the corner of Beacon and east -- and West Eighth Streets, and it's looking north-northwest as this caption says. And, but this one says at 75 foot transmission poles with, that's the mitigated proposal, and the transition structure with foliage, and the transition structure would essentially be, has been modified from what was originally proposed and shown, say, the location is not the same as the location in figure, my figure

10-B. It's been moved, as I said, to the northwest corner of the Delta Diablo pumping station.

So it's farther away. So the trees --

MS. GEFTER: How much farther away is it from in the original picture where we had figure 10-A and 10-B?

THE WITNESS: I think about 200 feet.

MS. GEFTER: Farther away from the house?

THE WITNESS: Yes. Actually it's not just one house. You can only see one here, but there are houses on both sides of the picture. This is one --

MS. GEFTER: Okay.

THE WITNESS: -- small triangular lot that isn't built on --

MS. GEFTER: Right.

THE WITNESS: -- which provided a good opportunity for a picture. And so even before the trees grow up, the impacts won't be nearly as great as what was shown in figure 10-B because of the reduced height of the poles, the fact that the poles will now also be set substantially farther away, and that the transition station itself is set farther away.

MS. GEFTER: We still see the plume, though?

THE WITNESS: Well, the plume is for an existing plant.

MS. GEFTER: Existing plant?

THE WITNESS: Yes.

MR. ELLER: Mr. Walker, or Mr. Patch, I'm not sure which, what are the age of the trees that are depicted in these simulations?

THE WITNESS: I don't know. I didn't do the simulations.

MR. PATCH: Mature to the point that they --

MS. GEFTER: I'm sorry, come forward to the microphone, please.

Mr. Patch for the Applicant.

MR. PATCH: The attempt was to photosimulate trees that were mature to the extent that they would be able to provide a height in the 20-foot-plus-minus range, which then provided the visual screening that we're attempting to do.

MR. ELLER: So these are trees that are five, 10 years old?

MR. MOORE: To get that height they're going to have to be over 10 years old.

MR. ELLER: Right.

MR. PATCH: I guess.

MR. ELLER: Thank you.

THE WITNESS: And it depends on how large of trees you plant, too, how old they are when you plant them.

MR. ELLER: Sure.

THE WITNESS: So that could be one element of the landscape plan, to require somewhat older, larger trees. As was specified in the Sutter case.

MR. MOORE: Thank you.

MS. GEFTER: Is the pictures shown in 10-A and 10-B and also 10-M, this whole site here, is this the visual site that has the most impacts, would otherwise have the most impacts because it's located near a residence?

THE WITNESS: Well, I didn't draw a distinction between the western transition station and the eastern transition station about how significant the impacts were, but if you take a look at the figure 5-A and 5-B, you'll see that the, as originally proposed and as simulated, the transition station and the first pole would dominate the views dramatically. And so --

MS. GEFTER: Yes.

THE WITNESS: -- moving them farther away and using shorter poles and providing the screening would substantially reduce that impact.

MS. GEFTER: And then on figure 7-A and 7-B, does that show the soundwall? There's a fence or a wall.

THE WITNESS: And this area is west of the powerplant project and there's no soundwall proposed in this area.

MS. GEFTER: Well, what is that, I'm looking at figure 7-A and then figure 7-B which is a photosimulation? It looks like there's a fence or a wall.

THE WITNESS: Well, there's an existing fence at the back sides of those properties.

MS. GEFTER: I don't know if we're looking at the same simulation.

THE WITNESS: Okay, I'm sorry, you're not talking about key observation points, then, I was confused.

MS. GEFTER: No, I'm talking about figure 7-A and figure 7-B.

THE WITNESS: Okay, yes, there's no existing soundwall there now, and so your question again was?

MS. GEFTER: I -- my question is where is this, is this the soundwall that we've been discussing throughout --

THE WITNESS: Yes, that's it.

MS. GEFTER: That's what it would look like? And from what perspective, is this from the road, the potential road --

THE WITNESS: This, no, it's from the sidewalk in front of the homes on the south side of Santa Fe Avenue.

MS. GEFTER: Are there any other questions of the witness?

Is there any redirect from staff?

MR. RATLIFF: No.

MS. GEFTER: Okay, any public comment on visual resources at this point?

Witness is excused.

(Witness excused.)

MS. GEFTER: We have question from the Applicant.

MR. THOMPSON: Yes, would it be permissible to put on Mr. Wehn for two questions for clarification?

MS. GEFTER: On what topic?

MR. THOMPSON: Visual.

MS. GEFTER: That, is that all right with Applicant  
(sic)?

MR. RATLIFF: Certainly.

MS. GEFTER: Yes.

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Whereupon,

SAM WEHN,

having been previously duly sworn, was recalled as a witness  
herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Mr. Wehn, when the truck bypass road is constructed,  
am I correct that the reclaimed water line will be placed by  
that road and reclaimed water will be made available to the city  
for use on the park next to the bypass road?

A That is correct. The reclaimed water line will be  
running from the Pittsburg-Antioch highway parallel to Santa Fe  
-- excuse me, parallel to Columbia Street, that'll be in the  
bypass road area. And then the Pittsburg, City of Pittsburg,  
will then from that line branch out and use it for whatever they  
deem necessary.

Q Thank you. And secondly, with regard to the size of  
trees that you are going to plant, we're not talking these one-  
little-bucket jobs that I buy, we're talking fairly larger trees  
than that; is that right?

A That is correct.

MR. THOMPSON: Okay, thank you.

MS. GEFTER: While Mr. Wehn is on the witness stand, has the Applicant considered how to maintain the landscaping that is proposed in the conditions?

THE WITNESS: It is our expectation that the City of Pittsburgh will be benefiting to the degree of 60 percent from the net profits, and I think from that there'll be sufficient moneys for them to maintain these areas.

MR. MOORE: Mr. Wehn, just so that I'm clear, it's not that I had any doubt that the amount of property tax revenue that was generated from this or any other mechanism that you might create would not create sufficient revenue to do this. That really wasn't my -- the line of my question.

Rather, what I was going to was the idea that I wanted to make sure that there either was a dedication, sequestering of funds or in some other way something that made sure that the city was capable of and really had a line item, if you will, or some other mechanism included within their budget to make sure that this stayed maintained; that they weren't finding themselves in some position where they were crippled by this falling into a category of the general fund where it wasn't covered or something.

I just wanted to make sure that we thought out how the maintenance of this would be achieved over time; wasn't a question of was there going to be enough revenue. I -- that much was clear.

THE WITNESS: I can tell you that we've had a discussion with the city manager on this subject. I can't tell you at this moment that there's a resolution to the extent that you're just describing. But we've --

MR. MOORE: No, I'm not --

THE WITNESS: -- we've initiated the discussions.

MR. MOORE: -- I'm not saying that there has to be this moment, but I'm saying it's an important enough issue, let's solve it before we finish all this.

MR. ELLER: Mr. Wehn, I understand you, you know, you're not going to put in a one-gallon tree, but can you specify at this time what size trees you're planning on planting? Are they going to require crews, are they going to require forklifts to carry, I mean, are --

THE WITNESS: I'm sure it's going to be larger than a one-man-carry-type tree. Is it going to be equipment used, I'm sure it will be. I'm not sure how to describe a size, to be perfectly honest with you.

MR. MOORE: Well, normally those are described in gallonage, and so if I, it seems to me if what you want is something that can get to maturity in -- pick your number -- five years, you're going to be dealing with a 50-gallon or a hundred-gallon tree. In other words, you're going to be dealing with something that's two to three meters in height and at that point it's got good growth potential. Yes, it's a larger initial cost but frankly the transition is easier.

So I think if I understand Mr. Eller's question, that's where he's going is to that you find something that can get to a maturity height in a reasonable period of time, that you're not waiting 50 years for coverage to occur.

THE WITNESS: It was not our -- we did not envision the -- when we planted the tree at that moment that then it would cover visually the structure, but it was our envisioning that whatever we installed would be, or planted, would be within five years covering the visual aspects as we have described it in our application.

MR. MOORE: Well, that in turn describes what the tree would be.

THE WITNESS: Okay.

MR. ELLER: Thank you. That's what I was looking for.

MS. WHITE: Commissioner, if I might. Lorraine White.

MS. GEFTER: Yes.

MS. WHITE: The representative from the City of Pittsburgh might assist you in answering your questions about landscape maintenance around the linear parks and other visual screens, and --

MR. MOORE: Actually in terms of maintaining, I brought it up at this point because I wanted to ask Mr. Walker if he'd thought about it. He concedes that that is something that is integrated with it. The question probably deserves to be answered in socioeconomic section. That's where there's likely to be a little bit more focus on it.

So I raised it here but frankly the answer to it probably lies in another discussion.

MS. WHITE: Okay, thank you.

MS. GEFTER: Thank you. Does staff have any cross-examination of Mr. Wehn at this time?

MR. RATLIFF: No.

MS. GEFTER: No, okay. Does anyone have any further questions of Mr. Wehn?

Any redirect?

MR. THOMPSON: None.

MS. GEFTER: Okay, witness is excused.

(Witness excused.)

MS. GEFTER: That concludes our topics for this afternoon and this evening we will reconvene at 6:00 PM here at civic center, civic city hall, and tonight the topics are soil and water resources, socioeconomics and worker safety and fire protection, not necessarily in that order this evening, 6:00 PM.

Otherwise, at this point, the hearing is adjourned.

(Whereupon, at 3:44 p.m. the hearing was recessed, to reconvene, at 6:00 p.m., at the same place.)

E V E N I N G     S E S S I O N

6:11 p.m.

MS. GEFTER: On the record now.

I'm going to repeat our introductory remarks once again for the benefit of members of the public and other parties who were not here this morning or yesterday.

We are here to conduct evidentiary hearings on Enron's application for certification for the Pittsburgh District Energy Facility.

Before we begin we want to introduce the committee, and then ask the parties to identify themselves for the record. The committee is Vice-chair Rohy, is presiding member this evening; Commissioner Michal Moore is unable to be here this evening. His adviser, Shawn Pittard, is here, and also Bob Eller, on my far right, is Vice-chair Rohy's adviser. I'm the Hearing Officer, Susan Gefter.

Will the Applicant please introduce yourself and your representatives.

MR. THOMPSON: Yes, my name is Allan Thompson, representing Enron, and do you want to do it -- seated to my left is Mr. Sam Wehn, project manager for Enron for the PDEF and to his left, Mr. Robert Ray. Mr. Robert Ray is environmental lead from URS-Greiner-Woodward-Clyde, and our first witness tonight.

Sitting in the audience is Mr. Joe Patch from Patch, Incorporated, who is primary engineering consultant to the

Applicant. And I think we have a couple other interested folks, witnesses, etc., in the audience.

MS. GEFTER: Thank you.

Staff, would you introduce yourselves, please?

MS. WHITE: Lorraine White, the project manager for staff's assessment.

MR. RATLIFF: Dick Ratliff, counsel to staff.

MS. GEFTER: CURE, intervenor?

MS. POOLE: Kate Poole for CURE. And with me is Greg Feere who will CURE's witness this evening.

MS. GEFTER: Okay, representative from CAPIT, would you please come forward.

MS. LAGANO: Paulette Lagano with CAPIT.

MS. GEFTER: City of Antioch representative.

MR. BRANDT: Good evening. I'm Joe Brandt with the City of Antioch. With me this evening is Dr. William Faisst, who will be presenting testimony.

MS. GEFTER: Thank you. And representative from Calpine's delta energy center.

MR. BERTACCHI: Yes, Bryan Bertacchi, representing Calpine.

MS. GEFTER: The energy commission's public adviser, Roberta Mendonca, is also here this evening, and if anyone has any questions about this process, you may see her and she'll try to assist you.

Any agency representatives, City of Pittsburg, someone here from the City of Pittsburg this evening. Yes, could you come forward and identify yourself.

MR. BECERRA (PH.): Chris (ph.) Becerra (ph.), the planning department.

MS. GEFTER: Thank you. Is anyone here from the Delta Diablo wastewater facility.

MR. BAATRUP: Greg Baatrup, representing Delta Diablo.

MS. GEFTER: Thank you. Okay, members of the public who would like to come forward and identify yourselves, if you're going to speak to us later, make comments, welcome to come forward now and identify yourselves.

Okay, if anyone wants to speak later, let us know.

I'm going to give you a little bit of background on the purpose of these evidentiary hearings. They are formal in nature. The purpose is to receive evidence and to establish a factual record necessary to reach a decision in this case.

The Applicant, Enron, has the burden of proof, presenting substantial evidence to support the findings and conclusions required for certification of the proposed facility. Prepared testimony has been filed by the parties, and we will hear oral testimony this evening.

Witnesses will testify under oath or affirmation. During the hearings, a party sponsoring a witness shall briefly establish the witness's qualifications and have the witness orally summarize the prepared testimony before requesting that the testimony be moved into evidence.

Relevant exhibits may also be offered into evidence at that time. At the conclusion of a witness's direct testimony, the other parties have an opportunity for cross-examination, followed by redirect and recross-examination. As warranted, multiple witnesses may testify as a panel. And members of the committee will ask questions as well.

At the conclusion of each topic, we invite members of the public to offer their unsworn public comment.

Are there any questions about the process at this point?

All right. We are about to begin testimony on the topic of soil and water resources. We will ask the Applicant to present all their witnesses on that subject and then we will go on to the other parties.

MR. THOMPSON: Thank you. We have five witnesses on the soils and agriculture area. The first witness we would like to call is Mr. Robert Ray, who has been previously sworn. Whereupon,

ROBERT RAY,  
having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Mr. Ray, would you please give your full name for the record?

A Yes, it's Robert Ray.

Q And are you the same Robert Ray that submitted prepared testimony now contained in Exhibit 30 to this proceeding?

A Yes, I am.

Q And am I correct that today you are sponsoring Exhibit 1, section 1-5.4, agriculture and soils?

A Yes, I am.

Q Do you have any corrections, additions or deletions to make to that material?

A I do not.

Q And your biography or resume has been submitted as part of the record in this proceeding?

A Yes, it has.

Q Would you please give us a brief summary of your testimony in the soils and ag area?

A Certainly. The purpose of the agriculture and soils assessment in the AFC was to assess whether construction or operation of the proposed project would result in accelerated soil erosion and whether the proposed project would adversely impact or displace agricultural land uses, including prime farmland.

The primary source of data used to perform the ag and soils assessment is the 1977 soil survey of Contra Costa County, which was prepared by the Soil Conservation Service, which is now known as the Natural Resources Conservation Service. I also did consultation with the NRCS regarding prime farmland in the project area.

In summary, to summarize the baseline conditions in the project area, the native soils in the project area are primarily clays and clay loams formed on alluvial fan and terrace deposits. The proposed powerplant site and the majority of the associated linear components are located on non-native fill and/or previously disturbed areas adjacent to industrial facilities, roadways, rail lines or existing utility rights-of-way. The erosion susceptibility of the soils in the project area is primarily moderate for both wind and water. No agricultural farmland is traversed by any of the proposed project components or is not present, and it's also not present at the project site.

In summary, with implementation of the Applicant-committed mitigation measures, including the proposed erosion control and stormwater management plan, and the CEC conditions of certification for soils, no significant impacts to the soils resource or agricultural resources are anticipated.

That concludes my testimony.

Q Mr. Ray, I take it from your testimony that you have reviewed the staff assessment and the conditions of certification and verification contained in that area?

A Yes, I have.

Q And would you recommend to the Pittsburg District Energy Facility that they adopt those conditions and verifications?

A Yes, I would.

MR. THOMPSON: Thank you very much.

Mr. Ray is tendered for cross-examination.

MS. GEFTER: Does staff have cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does the City of Antioch have cross-examination of this witness?

MR. BRANDT: No, we don't.

MS. GEFTER: Okay, any other party has cross, does anyone else have cross-examination of witness?

Okay, one question regarding the erosion plan that you referred to --

THE WITNESS: Yes.

MS. GEFTER: -- would you describe it a bit in summary for us?

THE WITNESS: The plan has been prepared, it was prepared both with my input as well as the water resources task feeder's input. It's basically a plan that's meant to address the plant site and all the linear components, both for construction and operation. It includes measures to, for both erosion control and stormwater management, primarily to protect against accelerated soil erosion and sedimentation of water resources. It includes what are typically referred to as BMPs, which are best management practices, are for protecting against soil erosion and resultant sedimentation of water bodies.

MS. GEFTER: Is it in final form at this point, the erosion plan?

THE WITNESS: It was submitted as a preliminary plan and it will be updated as part of the SWPPPs that will be done for both construction and operation in accordance with NPDES permit requirements.

BY MR. THOMPSON:

Q SWPPPs?

A I'm sorry, stormwater pollution prevention plans.

MS. GEFTER: And it was submitted to where?

THE WITNESS: Was submitted to the energy commission as a response to a data request back in, I believe, November. It's part of the record, I believe.

MS. GEFTER: What is still pending before it is finalized?

THE WITNESS: As far as I'm aware right now there isn't anything pending, it was called a preliminary plan. I don't believe that we received any comments on it that would cause us to have to revise it. I believe maybe is one of the conditions of certification, and maybe Joe could speak to this when he gives his testimony, Joe O'Hagan, that there may be a requirement for us to submit it as a final plan.

MS. GEFTER: Thank you.

Is there any more redirect?

MR. THOMPSON: No.

MS. GEFTER: Okay, this witness is excused.

(Witness excused.)

MS. GEFTER: Call your next witness.

MR. THOMPSON: I would like to call Mr. Max Ramos, please. Mr. Ramos has not been sworn.

Whereupon,

MAX RAMOS,  
having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

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DIRECT EXAMINATION

BY MR. THOMPSON:

Q Would you please state your name for the record?

A My name's Max Ramos. I'm an assistant project engineer for URS-Greiner-Woodward-Clyde.

Q I'm going to give you a copy of a resume with your name on top; is this indeed your resume?

A Yes, it is.

Q Thank you. Mr. Ramos, you are today sponsoring Exhibit 1, section 1-5.5, water resources?

A That is correct.

Q And am I -- you have any corrections, additions or deletions to make to that material?

A No, I do not.

Q And am I correct that that material was prepared by you, under your direction or you have read and adopted it?

A Yes, I have.

Q Thank you. Would you please summarize the water resources section for the --

MS. GEFTER: One minute, Mr. Thompson. You distributed a resume for Mr. Ramos but we have not marked it and identified it for the record, nor have I asked any of the parties if they have any objection to it. So --

MR. THOMPSON: Okay, did you want to mark --

MS. GEFTER: -- before your expert witness --

MR. THOMPSON: Okay.

MS. GEFTER: -- testifies, let us mark the exhibit. What do you want it, next in number?

MR. THOMPSON: Yes.

MS. GEFTER: Or which -- okay. That would be Exhibit 35, would be the resume from Maximo C. Ramos, Exhibit 35.

(The document referred to  
was marked for identification  
as Exhibit 35.)

MS. GEFTER: And at this point I would ask the parties in turn whether they have any objection to the qualifications of Mr. Ramos to testify about soils and water.

Is there any objection from staff?

MR. RATLIFF: No.

MS. GEFTER: Okay, any objection from City of Antioch?

MR. BRANDT: Not sure I've seen this --

MR. THOMPSON: His written testimony is section 5.5 of the AFC, it's the water section.

MS. GEFTER: Okay, any objection from CURE?

MS. POOLE: No.

MS. GEFTER: From CAPIT?

No, okay. I take it City of Antioch has no --

MR. BRANDT: No.

MS. GEFTER: -- objection? All right.

So your witness may testify now. Thank you.

MR. THOMPSON: Thank you.

BY MR. THOMPSON:

Q Would you please summarize the water section,  
Mr. Ramos?

A Yes. The water resources study was conducted according to CEC guidelines, and addresses water supply, surface and groundwater quality, flooding and hydrology issues.

We began the study by gathering existing data or speaking to appropriate personnel from various agencies. Some of the agencies we spoke to and gathered data from were City of Pittsburg, where we received hydrologic and water supply information; Contra Costa County, public works department, where we got hydrologic information; and we also reviewed previous water quality data from USS Posco.

We also consulted Federal Emergency Management Agency, FEMA maps, which indicated the hundred-year floodplain, the project area. And we also incorporated engineering input from Patch Engineering into the study.

A review of the San Francisco bay basin water quality objectives was also conducted as part of the study. And these data and these conversations with other agencies were used to evaluate possible water resources impacts of the proposed PDEF facility.

The findings and conclusions of this study are the City of Pittsburg has a potable water treatment and delivery capacity of 32 million gallons per day. Current peak demand is approximately 15 to 17 million gallons per day. If for emergency reasons the PDEF needs potable water to continue running the facility, there they would require 3.4 to 3.7 million gallons per day which the City of Pittsburg can accommodate.

No significant impacts to water supply due to the operation of the PDEF are anticipated to the City of Pittsburg supply.

The final plant site will be substantially higher than the hundred-year base elevation which we obtained from the FEMA flood insurance rate maps, and this will alleviate flooding potential due to a hundred-year storm. Therefore, no significant impacts of the facility are expected due to the hundred-year base flood event.

Wastewater from the PDEF will be returned to the Delta Diablo water treatment facility for treatment. The return water will meet Delta Diablo local discharge limits and no impacts from the return water discharge are expected.

That concludes my testimony.

Q Thank you. Mr. Ramos, one question I forgot to ask. The resume that I handed out with your name on it, that does reflect your qualifications?

A Yes, sir.

MR. THOMPSON: Thank you very much.

I would ask that Exhibit thirty --

MS. GEFTER: Five.

MR. THOMPSON: -- five be accepted as the next exhibit in order.

MS. GEFTER: Any objection by any party?

Hearing none, Exhibit 35 is now admitted into the record.

(The document referred to,  
having been previously marked  
for identification as  
Exhibit 35, was  
received in evidence.)

MR. THOMPSON: Thank you. Mr. Ramos is tendered for cross-examination.

MS. GEFTER: Staff have any cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does CURE have any cross-examination of the witness?

MS. POOLE: No.

MS. GEFTER: Does City of Antioch have cross-examination? If you do, would you come on forward and you're invited to cross-examine the witness. We'll have to bring a chair for you so you can sit next to a microphone.

MR. RATLIFF: Use this.

MS. GEFTER: Okay, and you may go ahead and cross-examine. You're --

MR. FAISST: I'm Dr. William Faisst with Brown & Caldwell, representing the City of Antioch.

MS. GEFTER: Thank you.

CROSS-EXAMINATION

BY MR. FAISST:

Q One question related to water resources. You mentioned the City of Pittsburg has a water supply and you denoted that water was available from Pittsburg. Would the additional demand that you're talking about, how does that coincide or how does that, how is that in context of the overall east county water management planning that's been done? There was a report issued in 1997, and if your, if you have the City of Pittsburg's demand and your demand on top of that, is there still sufficient, overall water resources available to serve the powerplant?

MR. THOMPSON: If you are familiar with country requirements and could answer it, go ahead.

THE WITNESS: I'm not familiar per se with the report you're talking about. But as far as speaking to the City of Pittsburg, like I said, they have the capacity to deliver 32 million gallons per day. The peak demand currently is about 15 to 17 million gallons per day, and the PDEF anticipates requiring if necessary 3.4 to 3.7 million gallons per day, and even including anticipated growth from City of Pittsburg, in the foreseeable future they should be able to meet those requirements by the PDEF.

BY MR. FAISST:

Q But have you looked at that demand, your demand on top of the City of Pittsburgh's demand in relation to overall water resources planning for east Contra Costa County and particularly the drought shortfalls that are projected to occur as early as the year 2010?

A No, not myself. No, I have not and I can defer that to someone more would be appropriate to answer that question.

MR. THOMPSON: If your answer's no, your answer's no.

MS. GEFTER: Okay, you, of course, are welcome to cross-examine other witnesses.

MR. FAISST: Yes.

MS. GEFTER: And ask the same question again, okay.

CAPIT, do you have any cross-examination of the witness?

Okay. Okay, committee -- oh, staff, sorry.

MR. RATLIFF: No.

MS. GEFTER: Okay, committee.

MR. ROHY: I'm not sure where I'm going on this, but are you examining the subsurface water situation at the site?

THE WITNESS: You speaking groundwater quality?

MR. ROHY: Groundwater, yes.

THE WITNESS: It has been looked and as part of the study.

MR. ROHY: Is that your area of expertise?

THE WITNESS: No, it is not.

MR. ROHY: Thank you.

MS. GEFTER: Okay, any more questions for this witness?

Okay, the witness is excused -- do you have redirect?

MR. THOMPSON: I do.

MS. GEFTER: Okay.

REDIRECT EXAMINATION

BY MR. THOMPSON:

Q Am I correct, Mr. Ramos, that the primary source of water for the plant will be reclaimed water from the Delta Diablo wastewater treatment facility?

A That is correct.

Q In normal operations, the powerplant would use reclaimed wastewater as its primary source of water?

A That's correct.

MR. THOMPSON: Thank you.

MS. GEFTER: Any cross-examination on that question?

MR. RATLIFF: No.

MS. GEFTER: From any party?

Okay, hearing nothing, the witness is excused at this point.

(Witness excused.)

MR. THOMPSON: Applicant would next like to call Mr. Joe Patch, Mr. Patch having been previously sworn. Whereupon,

JOE PATCH,

having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Mr. Patch, would you state your name for the record, please?

A Yes, Joe Patch.

Q And are you the same Joe Patch that was sworn and testified yesterday?

A Yes.

Q Now today as I understand it you are testifying to Exhibit 2, which are the Applicant's responses to staff data requests, 2-soils&water, No. 1, and No. 2, as well as Exhibit 5, which is the preliminary erosion control stormwater plan; Exhibit 7, which is part of the AFC supplement submitted in October regarding the reclaimed water analysis; and Exhibit 26, which is entitled Delta Diablo Baseline Monitoring Report; is that correct?

A Yes.

Q Do you have any corrections, additions or deletions to make to your testimony in the water area?

A No, I don't.

Q Would you please very briefly summarize your testimony in this area?

A The water supply for the plant has been derived from Delta Diablo. Delta Diablo will provide a tertiary treatment facility, will supply, this will supply PDEF. The primary demand for the water to the plant will be for the cooling tower,

cooling tower makeup. There is a backup source of water, which will be the potable water supply for PDEF.

MR. THOMPSON: Thank you.

Mr. Patch is tendered from cross-examination.

MS. GEFTER: Does staff have cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does CURE have cross-examination?

MS. POOLE: No.

MS. GEFTER: City of Antioch? May come on up. In fact, why don't you sit up here during the entire water testimony so that --

MR. RATLIFF: Well, in that case I give him a different seat.

MR. FAISST: Thank you.

MR. THOMPSON: Getting all your exercise, Dick.

MR. FAISST: Dr. William Faisst with Brown & Caldwell on behalf of the City of Antioch.

#### CROSS-EXAMINATION

BY MR. FAISST:

Q I ask you the same question regarding the overall water supply in the context of the -- get the right reference here -- the phase 2 of the east county water supply management study summary report?

A Can you repeat the question for me?

Q The question is the previous witness discussed the City of Pittsburg having the water available but was unable to

deal with the overall water supply availability for east Contra Costa County, and the question that comes to my mind is within the context of overall water supply availability does your demand on top of the Pittsburg demand create a problem vis-a-vis the overall east county water supply planning and the availability of water, particularly during drought years, adverse impacts that might have on other east county users if you have to go to your alternative water supply?

A Again, the primary source of water is the reclaimed water tertiary treated from Delta Diablo. Discussions that we've had with the city without specific reference to the plan is that the capacity that currently exists in the city for both treatment and distribution would satisfy a backup source which would be the potable water supply from the Pittsburg facility. Whether or not Pittsburg has identified its total take or what its current take is in relation to its ability to be supplied, whether it's a canal or what this plan is you've identified is, we did not address that.

MS. GEFTER: Mr. Patch, could you speak closer to the microphone, it's --

THE WITNESS: Oh.

MS. GEFTER: -- very hard for us to hear you.

THE WITNESS: Sorry.

MR. ROHY: You could move that microphone there --

MS. GEFTER: Even closer.

MR. ROHY: -- closer to you.

MS. GEFTER: Yes. Thank you.

THE WITNESS: Okay. Do I need to repeat all that?

MR. THOMPSON: If the reporter is --

MS. GEFTER: Were you able to hear the witness's testimony?

THE REPORTER: I was, yes.

MS. GEFTER: Okay.

BY MR. FAISST:

Q So the short answer is no?

A In relation to the plan specifically, no, we, I have not, we did not. Yes.

MR. FAISST: Thank you.

MS. GEFTER: Does CAPIT have any cross-examination of the witness? Any other party?

Committee?

I have a question for Mr. Patch regarding tertiary treated water. Would you explain to us what that is, what the process is and what the reason that you're using that water?

THE WITNESS: Tertiary again means a third level or third stage of treatment -- wrong one -- third stage or third level of treatment. Currently the plan is that Delta Diablo install a facility that will take what it currently discharges which is secondary effluent, it will bring the water into a mix tank where there'll be some chemicals added for flocculation. That water then will be filtered. That water will then be disinfected and at the end of that stage it is then treated to the point of a tertiary treatment, i.e., Title 22 satisfies, is satisfied.

And at that point it will be taken and pumped to the PDEF.

MS. GEFTER: And then the wastewater then that comes back from PDEF to the sanitary sanitation district --

THE WITNESS: Yes.

MS. GEFTER: -- is wastewater that was originally tertiary treated and that goes back to the --

THE WITNESS: Yes.

MS. GEFTER: -- district?

THE WITNESS: Yes, it's just cycled up in the tower, yes.

MR. ROHY: Mr. Patch, you said that in normal circumstances you'd use the tertiary treated water; is that correct?

THE WITNESS: Yes.

MR. ROHY: Do you have any expectations, any predictions, how many years, how many seasons, you -- or how many days you might rely on the potable water supply?

THE WITNESS: It is our expectation that the facility that will be installed at Delta will be highly reliable; to hedge the reliabilities on a short-term basis, there will be both storage capacity at Delta Diablo's facility as well as a 600,000-gallon tank at PDEF. Whether that relates to a day in five years or 20 years, on an outfall in the southern part of the peninsula in talking to that wastewater treatment facility they had identified, I think, two outages in 20 years.

MR. ROHY: And how long might those outages be?

THE WITNESS: We asked the same question. They were a matter of hours. Partly because the wastewater treatment plant has to discharge, it has to discharge somewhere, and --

MR. ROHY: Can you tell me when you say hours, can you give me some number there, is it one, 10, a hundred?

THE WITNESS: Oh, short-term, less than 24. I believe it was less than 24.

MR. ROHY: So you're saying that in that case it was perhaps less than 24 hours outages, two of those outages in 20 years?

THE WITNESS: Yes, that's what we were told. Highly -  
-

MR. ROHY: Would you expect the same type of performance in this case?

THE WITNESS: Yes. Certainly would.

MS. GEFTER: In staff's testimony there was some evidence about 25 percent of the sanitation district's recycled water would be used by the PDEF facility; is that an accurate number?

THE WITNESS: 25 percent --

MS. GEFTER: I may have misread the testimony, but is it the PDEF is using a certain percentage of the sanitation district's recycled water? And so that would impact on the district?

THE WITNESS: The PDEF is using a percentage of the current plant's discharge volume, and I guess I'd like to defer to Delta Diablo. I'm -- their demand, obviously, their

discharge demand fluctuates. And the PDEF take from the current secondary effluent that then would be treated, I'm not sure what that percentage is, but maybe we can ask that question of Mr. Baatrup.

MS. GEFTER: Okay.

MR. ROHY: Will your demand be constant over 24-hour basis?

THE WITNESS: No.

MR. ROHY: What are the factors that would cause your demand to go up or down?

THE WITNESS: As we've been able to identify it with the Applicant, obviously the power swings at night, power prices drop, the plan is that the plant will either scale down and/or possibly stop turbine.

So the demands will follow basically the power demand. As the power demand and peak demand exists across the 6:00 in the morning to 10:00 at night, that would be kind of the maximum demand for water. That will vary slightly based on the atmospheric conditions, hot day versus a cold day, early morning, less evaporation than, let's say, at midday.

MR. ROHY: And that operation you just described results in the 3.4-to-3.7-million-gallon-per-day usage?

THE WITNESS: Yes, those are maximum numbers, those 3.4 to 3.7. We've identified in the table, water usage table in the AFC and tried to strike a what would be the maximum demand versus what is, what we've tried to characterize as an average demand. Those 3.4 to 3.7 are on the maximum side.

MR. ROHY: Thank you.

THE WITNESS: Yes, sir.

MS. GEFTER: Any redirect by the Applicant?

MR. THOMPSON: Nothing.

MS. GEFTER: Okay, are you planning to ask Delta  
Diablo to --

MR. THOMPSON: We don't have much control over them.  
I guess we'd like to invite them if they would like to testify,  
but --

MS. GEFTER: Perhaps --

MR. RATLIFF: The staff is intending to call them as a  
witness.

MS. GEFTER: Okay, fine.

MR. RATLIFF: Okay.

MS. GEFTER: Okay, thank you. So we'll have an  
opportunity to talk to them.

Okay, the witness is excused.

(Witness excused.)

MR. THOMPSON: Thank you. Next, Applicant would like  
to call Mr. Sam Wehn, Mr. Sam Wehn having previously been sworn  
yesterday.  
Whereupon,

SAM WEHN,  
having been previously duly sworn, was recalled as a witness  
herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

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Q Mr. Wehn, would you state your name for the record, please?

A Yes, Samuel Wehn.

Q And today you are testifying on water, specifically responses no. 3 and 4 to staff data requests on the -- concerning the number of days of summer operation and our application to Delta Diablo; is that the sole reason you're testifying in the water area?

A Yes.

Q Would you briefly summarize your testimony?

A The testimony as presented in the CEC data request dated August 24th depicts the number of days in the months of July, August and September that we might be operating whenever the temperature is greater than 85 degrees, and I think that hasn't changed insofar as our opinions of how this, the temperatures during that period of time as well as how we were going to operate.

In addition to that, data request no. 4 requested an industrial discharge permit that would be issued by the Delta Diablo water sanitation district, and what we did is submitted as a part of this data request a copy of that, a completed copy of that industrial discharge permit, and we docketed that with California Energy Commission.

Q Thank you. Mr. Wehn, I asked Mr. Ray whether or not he would recommend that the project adopt the conditions of certification under the agricultural and soils area; I'm not going to ask you if you as a representative of the project would

adopt the water resources conditions of certification and verification contained in the staff's staff assessment?

A Yes, we will.

MR. THOMPSON: Thank you, that completes Mr. -- I believe that completes Mr. Wehn's testimony. Mr. Wehn is tendered for cross-examination.

MS. GEFTER: Staff have cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does CURE have cross-examination?

MS. POOLE: No.

MS. GEFTER: City of Antioch. No? CAPIT.  
Committee.

I have a question regarding the industrial discharge permit application that was submitted to energy commission staff. Is that a permit or is it just the application that was submitted?

THE WITNESS: It's actually the application but Delta Diablo indicated to us that they would not grant a permit until approximately 45 days before we actually start requesting water from them and returning water to them. So what we did was complete the application coordinated with them to make sure that it was a complete and acceptable application, and what we have docketed with you has been reviewed by Delta Diablo.

And in fact we will file, just as we have submitted it as a docketed material.

MS. GEFTER: So your understanding from Delta Diablo is that it's a complete application and that your permit will be granted based on the information you provided in that application?

THE WITNESS: That is correct.

MS. GEFTER: Okay, we have an opportunity to ask them that question, too, since they're here tonight. Thank you.

Okay, is there any redirect of the witness?

MR. THOMPSON: None.

MS. GEFTER: The witness is excused.

(Witness excused.)

MR. THOMPSON: Applicant would like to call its final witness in this area, Mr. Roger James.

Mr. James has not been sworn.

Whereupon,

ROGER JAMES,

having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Would you please state your name for the record?

A Yes, my name is Roger James.

MR. THOMPSON: I have distributed a two-page resume of Mr. Roger James to the parties, and I would ask that it be marked the next exhibit in order, No. 36.

MS. GEFTER: Exhibit No. 36, yes.

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(The document referred to was  
marked for identification as  
Exhibit 36.)

BY MR. THOMPSON:

Q Mr. James, does that resume indeed contain, is that indeed your resume?

A Yes, it is.

Q Thank you. I'm really only going to ask you two questions, Mr. James. Number one, what were you asked to do by the Pittsburg District Energy Facility?

A I was asked to review a number of documents that related to the potential impacts of the discharge from this facility on beneficial water uses within the vicinity of New York slough.

Q And would you please tell us what you did and what your conclusions were?

A Yes, I reviewed a number of documents, including the water resources document that was prepared by URS-Greiner as a part of the application. I reviewed the Pittsburg District Energy Facility's baseline monitoring report that was submitted to Delta Diablo, and also that district's January 28th, 1999, which accepted that as a satisfactory submittal for the proposed discharge.

I also have reviewed the Delta Diablo sanitation district's flowthrough bioassay testing protocols. I've

reviewed the NALCO laboratory protocols for testing a simulated waste stream from the proposed district energy facility. I've taken a look and reviewed the results of the acute toxicity of that simulated waste stream, as well as the San Francisco bay regional water quality control board's NPDES permit of November 1993 that was issued to Delta Diablo sanitation district which regulates that particular discharge.

I've also reviewed the Delta Diablo sanitation district's 1998 NPDES permit compliance summary, and I've reviewed a document that's been prepared by the Delta energy center as a report on waste discharge that has been submitted to the regional board that reviews the cumulative impacts of both the Delta energy center's proposed discharge as well as the combined discharge that would be from the district's energy facility, as well as Delta Diablo sanitation district.

Q I'm going to ask you one more question. I have passed out your resume to everybody. Would you please briefly describe your credentials for testifying in this area?

A Yes. I have both a bachelor's and a master's degree in sanitary engineering from the University of Wisconsin. I'm a registered professional engineer both in California and Wisconsin. I've had 28 years of experience with the San Francisco bay regional water quality control board, including five and a half years as the executive officer of that state agency, and I served as seven and a half years as the operations and water quality manager with the Santa Clara valley water district.

And for the past two and a half years I've been in the consulting field working on regulatory compliance issues.

MR. THOMPSON: Thank you very much.

I would like to move Exhibit 36 into evidence.

MS. GEFTER: Is there any objection from staff?

MR. RATLIFF: No.

MS. GEFTER: Any objection from any other party, speak up.

Hearing none, the Exhibit 36, which is the resume of Roger James is admitted in evidence.

(The document referred to,  
having been previously marked  
for identification as  
Exhibit 36, was  
received in evidence.)

MR. THOMPSON: Before I tender Mr. James for cross-examination, I forgot to ask him what his conclusions are.

(Laughter.)

MR. THOMPSON: I suspect my client would have reminded me of that.

THE WITNESS: Yes, I would like to say after reviewing those documents, I concur with the analysis and findings of the NPDES permit application for -- submitted by the Delta energy center and that I feel that the minimum dilution of 351 of the -- 350 to one of the combined wastewater plumes will not have any adverse effects of impacts on either the upstream or downstream water supply intakes.

Also, I feel that the combination of the initial dilution that will be achieved through these discharges and the lack of acute toxicity in the Delta Diablo sanitation district's discharge, as well as the simulated combined discharge, both demonstrate that there's not any adverse environmental impacts as well.

MR. THOMPSON: Thank you very much.

Mr. Roger James is tendered for cross-examination.

MS. GEFTER: Staff have any cross-examination of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does CURE have any cross-examination?

MS. POOLE: None.

MS. GEFTER: City of Antioch?

MR. FAISST: No.

MS. GEFTER: CAPIT?

MS. LAGANO: Yes.

MS. GEFTER: Yes? Come on forward.

MS. LAGANO: Paulette Lagano, CAPIT.

#### CROSS-EXAMINATION

BY MS. LAGANO:

Q When you evaluated the combination of discharge from the Delta energy center, did you take into consideration both the existing discharge as well as the proposed of the new facility, as well as I know you're doing PDEF?

A The work that was done by CH2M-Hill for the Delta energy center did that take in, did take that into consideration, yes.

Q Okay, and when you say that there are no environmental impacts, you're talking, you are speaking to the quality of water?

MS. GEFTER: Could you speak into the microphone?

MS. LAGANO: I'm sorry, okay.

BY MS. LAGANO:

Q Were you referring to the -- could you explain what you mean by there's no environmental impact, with this combination of discharges from both facilities?

A There would be not adverse impacts to the environment as a result of the waste discharges to the receiving waters.

Q Okay, you're not -- are you addressing groundwater?

A I did not address groundwater. I was talking about the waste discharges from the outfall of Delta diablo sanitation district as well as the proposed outfall from the Delta energy center.

MS. LAGANO: Okay, thank you.

MS. GEFTER: Any questions from the committee.

You have any redirect?

MR. THOMPSON: We do not.

MS. GEFTER: Witness is excused. Thank you.

THE WITNESS: Thank you very much.

(Witness excused.)

MR. THOMPSON: I would like to -- this completes our soils and water testimony. I would like to move Exhibit 5 and Exhibit 26 into evidence, please.

MS. GEFTER: Is there any objection to Exhibit 5 and 26 being admitted into evidence at this point?

MR. RATLIFF: Do you mean Exhibit 27, I think?

MS. GEFTER: Which --

MR. THOMPSON: 26 I have is the -- 27. 27, yes.

MS. GEFTER: Okay, the record is --

MR. THOMPSON: Thank you.

MS. GEFTER: -- corrected to refer to Exhibit 27, okay.

MR. THOMPSON: Same witness, different topic.

MS. GEFTER: Okay, so let's go over these exhibits again, Mr. Thompson, which ones do you want admitted.

MR. THOMPSON: 5.

MS. GEFTER: Exhibit 5.

MR. THOMPSON: 27. And then 36, which is Mr. James's resume.

MS. GEFTER: Is there any objection from any party to admitting Exhibits 5, 27 and 36 into the record?

City of Antioch.

MR. BRANDT: My question is what those exhibits amount to, I haven't seen copies.

MR. ROHY: Please come up and state the question in the microphone.

MR. BRANDT: Joe Brandt with the City of Antioch. My only question is what those exhibits are. I know 36 was the resume of the last gentleman, but I'm not sure what 5 was.

MS. GEFTER: Okay, Applicant, can you explain this --

THE REPORTER: Madam Chairman, I can hardly hear you anymore because your mike is so far away.

MS. GEFTER: I'm sorry.

MR. THOMPSON: Those were identified by Mr. Patch as the stormwater preliminary erosion control stormwater plan, and the Delta Diablo baseline monitoring report.

MR. BRANDT: Thank you, sir. No objection.

MS. GEFTER: Okay, Exhibits 5, 27, and 36 are now admitted into the record. Thank you.

MR. THOMPSON: Thank you.

(The documents referred to,  
having been previously marked  
for identification as  
Applicant's Exhibits 5, 27,  
and 36, were received in evidence.)

MS. GEFTER: Staff, do you want to present your witnesses at this point?

MR. RATLIFF: Staff will present Joe O'Hagan.

MS. GEFTER: Let's go off the record for a minute.

(Discussion was held off the record.)

MS. GEFTER: Back on the record.

Staff, would you like to introduce your witness on soil and water resources.

MR. RATLIFF: Staff witness is Joe O'Hagan.

Mr. O'Hagan needs to be sworn.

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Whereupon,

JOE O'HAGAN,

having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. O'Hagan, did you prepare the staff testimony and the staff assessment titled Soil and Water Resources?

A I prepared the majority of this testimony, and supervised the preparation of the remainder.

Q And what portion did you supervise?

A That was the calculations for the mass balance and the effluent water quality characteristics.

Q And did you prepare the supplemental testimony, Exhibit 29, which was disseminated subsequent to the staff assessment?

A Yes, I did, with the exception that I supervised the preparation of the effluent numbers in the mass balance which is in the table 1 of the supplemental testimony.

Q Thank you. Is that testimony true and correct, to the best of your knowledge?

A Yes, it is.

Q Do you have any changes to make to that testimony?

A I do. I do, only in the instance that there has been the change in the way the Delta energy center has identified the volume of their wastewater discharge, and so I provided new numbers for that, as opposed to the numbers in the table 1 of the supplemental testimony. And it'll be on one of the overhead projections.

Q So that'll be in one of the overheads that we're going to see?

A Yes.

MR. RATLIFF: In a moment, and we'll submit that in hard copy to the committee.

MS. GEFTER: Thank you.

BY MR. RATLIFF:

Q Could you summarize your testimony briefly?

A Yes. I looked at the potential for the Pittsburgh District Energy Facility to cause accelerated soil erosion and sedimentation, adversely affect water supply, degrade water quality and increase the potential for flooding. My testimony was based on analysis, the information supplied by the Applicant, and information collected from other sources, including the Delta Diablo sanitation district, City of Pittsburgh, City of Antioch, USGS and others. And testimony was also based on discussions with the representatives of those

agencies, as well as the regional water quality control board and others.

The -- in response to a data request, the Applicant had submitted an erosion control stormwater management plan. That was a very well-done plan that addressed the potential for erosion from the project, control of stormwater during construction of the facility as well as control of stormwater runoff during operation of the facility. Response to a question to the Applicant's witness, staff generally requests a draft permit because the Applicant generally doesn't have a final design for their project. In a situation such as this, generally there's several mitigation measures and best management practices that could apply to a certain problem, erosion control problem, for instance.

And that, so try to leave them flexibility but yet be able to see that the problems are being addressed. As I said, the plan that was submitted was well done, and as a proposed condition of certification, that they would submit a final plan that had been approved by the City of Pittsburgh.

Okay, in terms of flooding, that the Applicant has proposed raising the powerplant site several feet that would put the site well above the 100-year floodplain, and so flooding is not an issue. This increase in the elevation of the site will not increase flooding elsewhere, in terms of that issue.

In terms of water supply, the Applicant has identified two sources of water. One is the potable water supply from the City of Pittsburgh that would serve sanitary and drinking water

needs for the powerplant personnel. This Applicant identified that this would be 20 gallons per minute requirement. The City of Pittsburg has more than sufficient water supply available as well as treatment, water treatment, plant capacity to address this demand.

To back up for a second, the City of Pittsburg's water supply is from the Contra Costa water district through the Contra Costa canal, as well as from groundwater from their own wells.

The other water supply identified by the Applicant is to use tertiary treated effluent from the Delta Diablo sanitation district's wastewater treatment plant. Use of tertiary treated effluent is in keeping with the proposed department of health services Title 22 regulations which require for cooling tower use especially the use of tertiary treated effluent. It's also consistent with the general permit for -- from the regional water quality control board in terms of water reuse for wastewater treatment plants.

The wastewater treatment plant, the proposed demand by the project as identified by the Applicant witness would be 3.4 to 3.7 million gallons per day, depending on operation, operating conditions. As Mr. Patch identified, I believe it was, that during the peak demand periods of the warmer temperatures that they would probably have the higher demand figures, but overall the average operating conditions would probably be the circumstances.

To provide that amount of effluent, the Delta Diablo facility's tertiary treatment capacity is apt to be expanded. This issue was addressed and EIR by the district in 1991 had identified treating the whole 16.5 million gallons-per-day capacity of the wastewater treatment plant to tertiary treated level, and so the expansion of the tertiary treatment capacity had been covered in that EIR.

The project will use the effluent, as I said, for cooling purposes, but also for the steam cycle. The majority of the water used by the plant will be, go for the cooling cycle, and much of that water will be evaporated from the cooling towers. There will be a return flow from the waste, from the PDEF facility to the wastewater treatment plant of approximately about .9 million gallons per day average and 1.1 million gallons per day peak operating conditions.

The concern for this situation is that generally your inorganic constituents, your metals, that are in your source effluent going into the wastewater treatment plant remain even though a substantial amount of the water has been lost through evaporation. So what you have is concentrated wastewater stream going back to the wastewater treatment plant.

And -- yes, Lorraine -- on the overhead here is a map of the general project area that several of the facilities are identified, including the also proposed Delta energy facility and the PDEF facility. The -- and also the sanitation district's facility on the map. The outfall for the Delta

Diablo facility is right out into the New York slough which is a portion of Suisun Bay where the pencil is showing right now.

MS. GEFTER: Okay, do we have a copy of that map in your testimony?

THE WITNESS: No, but we will provide one.

MS. GEFTER: Okay, we need copies for us and also for all of the other parties.

THE WITNESS: Sure, okay.

MS. GEFTER: Thank you.

THE WITNESS: Then also, as I said, the PDEF is proposing to return their wastewater back to the wastewater treatment plant. The proposal by PDEF is that this wastewater would go back to the headworks of the wastewater treatment, in other words, it'd come in with all the other sewage and effluent from other dischargers and be processed through the wastewater treatment plant.

This would take up about, as I said, about a million gallons per day of capacity. That represents a large portion of the remaining capacity of the wastewater treatment plant. Its current capacity is 16.5 million gallons per day. The existing flow, I believe, is 13.2 million gallons per day, as of last year. It grows by about 200 to 250 thousand gallons per year.

The district does have plans to expand the facility, and the witness Greg Baatrup for Delta Diablo sanitation district can expand on that.

So the return will represent a fair, a large size of the remaining capacity. I did not determine that that was a

significant impact because there'll be sufficient capacity remaining and that the facility does plan to expand in the next few years.

The discussions with Delta Diablo sanitation district and reviewing the Delta energy center NPDES permit application, it appears that the district is interested in not routing the wastewater from PDEF to the headworks but to return it to late stages of the facility. The benefits of this is that it doesn't take up capacity of the wastewater treatment plant, and also that the treatment processes of -- at the wastewater treatment facility are not addressed to remove inorganic constituents -- basically it's to deal with organic wastes.

So once again, Mr. Baatrup can expound on that.

Get the next overhead.

This is just a schematic to show what is being proposed. The large circle there is the Delta Diablo sanitation district. The PDEF is on the lower left-hand corner there. The -- as I've indicated, Delta -- excuse me, PDEF plans to circulate the effluent through the cooling cycle three times, and so that's why that number's there. That would cause the concentration as well as the large evaporation losses of the water.

And as it shows that the project would get 3.4 million gallons per day on average and would return to Delta Diablo sanitation district the 0.9 million gallons per day. Also shown on the diagram is the DEC, Delta energy center facility which would receive on average 5.3 million gallons per day and return

to the facility approximately 2.1 or 2.06 million gallons per day.

Now in terms of my analysis I tried to take a look at whether the Delta Diablo providing effluent to PDEF as well as to DEC would cause the sanitation district's discharges to exceed their current NPDES permit. This NPDES permit expired, I believe, last year in November. It has been extended by the regional water quality control board until a new permit can be issued. Delta Diablo sanitation district's in the process of preparing a new NPDES permit, and I believe it'll be submitted late May. And once again, Mr. Baatrup can talk about that.

So staff did a mass balance, which there's a table in the supplemental testimony. It would be soil and water resources supplemental table no. 1, and we took a look at the district's existing NPDES permit limitations for five constituents. So these are all inorganic metals, and the reason those were selected for analysis is that Suisun bay is considered impaired for those constituents. So those are the ones of concern.

We also analyzed monitoring data from Delta Diablo sanitation district and came up with what's called the 95th percentile values which are the effluent numbers that would likely occur within 95 percent of the time in terms of the discharge, and those were calculated using standard EPA procedures.

In the next column, and if you want to jump ahead to that -- thank you -- and to help out, and if you compare the

table in the supplemental testimony with this one, the numbers are slightly different, and generally the ones on the overhead are smaller and that's because that in the AFC for Delta energy center they had identified a smaller wastewater flow returning to an outfall or back to the Delta diablo's outfall, and that had been clarified and the number has increased in their NPDES permit application.

So the numbers of concern are slightly smaller in this table. And as you can see, the values, well, let me talk, you have your what we estimate as the concentration for the effluent from DDS and then given the flows with PDEF receiving their effluent and DEC returning their effluent -- perhaps, Lorraine, you could go back to that previous slide or overhead -- it gets a little confusing, so --

MS. GEFTER: Okay, again are we going to --

THE WITNESS: Yes.

MS. GEFTER: -- have all of these slides --

THE WITNESS: Yes.

MS. GEFTER: -- in hard copy?

THE WITNESS: Yes.

MS. GEFTER: And you'll distribute it to all the parties as well.

THE WITNESS: Yes.

MS. GEFTER: Thank you.

THE WITNESS: Once again, you can see that calculating a mass balance is that it's predicated on PDEF receiving 3.4

million gallons per day, DEC receiving 5.3, PDEF would return 0.9 to the wastewater treatment plant; however, DEC has, would either return their 2.1 million gallons per day to the Delta Diablo sanitation district outfall, not going back to wastewater treatment plant, they're going to the outfall, or as we learned just recently, they're considering going to an existing Dow Chemical outfall on their property.

So that latter situation was not addressed in this, yet I would have to say that this analysis is a worst-case and separating the two discharges as DEC is considering would probably be beneficial, instead of having all three, if you will, going to the same outfall.

MS. GEFTER: And this slide we're looking at is a chart that you put together?

THE WITNESS: Yes.

MS. GEFTER: Okay.

THE WITNESS: Yes.

MS. GEFTER: Describe it so that for the record we know what we're --

THE WITNESS: Okay, this chart shows the wastewater going from the Delta Diablo sanitation district to PDEF and the DEC powerplant projects. It shows that DEC would be, in this specific chart, DEC would be discharging their wastewater to their own outfall, while the PDEF wastewater would be returned to the Delta Diablo sanitation district.

MS. GEFTER: Thank you.

THE WITNESS: And, of course, the wastewater

from -- remaining wastewater from Delta Diablo would go to their own existing outfall.

MS. GEFTER: Do you have a copy of this in hard copy today?

THE WITNESS: Yes.

MS. GEFTER: Okay.

THE WITNESS: Yes, I can give it to you.

MS. GEFTER: Because I'd like to give that to the reporter so when they are -- when he's preparing the transcript he can follow the testimony. Thank you.

THE WITNESS: Okay, certainly.

MR. ROHY: And I would appreciate it if you would number those in some way so the record --

THE WITNESS: Okay.

MR. ROHY: -- could have some number on them.

THE WITNESS: Okay, this one I'll number --

MS. GEFTER: Okay, this one which is the chart you just described.

THE WITNESS: Okay.

MS. GEFTER: Would be numbered 2?

THE WITNESS: Okay, chart no. 2, okay.

MS. GEFTER: No. 2 --

THE WITNESS: Okay.

MS. GEFTER: -- because the first one was a map.

THE WITNESS: Right. Correct.

MS. WHITE: This one's actually no. 2. This is the one that --

THE WITNESS: Oh, I'm sorry, okay, this would be no. 3

--

MS. WHITE: -- this one's no. 2, the one with them going down is no. 3.

THE WITNESS: Right.

MS. GEFTER: Okay --

THE WITNESS: Okay, and --

MS. GEFTER: -- this one, we're talking about that's going to be no. 2 is the description you just gave.

THE WITNESS: Yes. Yes, okay, this chart shows that DEC --

MS. GEFTER: This is no. 2.

THE WITNESS: Right.

MS. GEFTER: Okay, thank you.

THE WITNESS: Okay, that DEC would return their effluent back to the Delta Diablo sanitation district's outfall. Chart no. 3 would show that DEC is returning their wastewater to their own dedicated outfall, okay.

Thank you, and could you get back to the table, Lorraine, and we'll call the table no. 4.

Anyways, doing a mass balance with the -- assuming that Delta energy center's wastewater would go back to the Delta Diablo sanitation district's outfall and the PDEF's wastewater would go back to the wastewater treatment plant, we came up with the numbers that would be in the third column, the total daily effluent of 7.76 million gallons per day. And as you can see, for the constituents shown there, the concentration of the

discharge would be well under the existing NPDES permit limits for Delta Diablo sanitation district.

Now regardless of how Delta energy center discharges their wastewater, the total mass loading from the two projects will not change from existing conditions. In other words, those metals are going into the New York slough in the Delta Diablo's outfall, discharge, now. Instead, what happens is with the routing of the effluent to the two powerplants and the concentration and loss of water through evaporation, that the discharge concentration is increased but the total mass daily loading doesn't change from historic conditions.

Okay, that was the scope of my analysis based on concerns raised by the City of Antioch about impacts on their intake which is further upstream during certain conditions. Staff took a look at that issue. At this time Delta energy center has submitted an NPDES permit application package which has fairly extensive dispersion modelling as discussed by the Applicant's witness,  
Mr. James.

I'm not qualified to evaluate that aspect of the surface water modelling. We're engaging an expert witness to evaluate that and we will submit testimony addressing that issue on May 14th.

So I guess, to sum up, I find that the proposed project will not cause any project-specific impacts to soil and water resources, and on the cumulative impact analysis, in terms of water quality, we're still evaluating that issue.

MS. GEFTER: Thank you.

BY MR. RATLIFF:

Q Before we leave this. I say I'm impressed with the amount of work you've done and the amount of information you just went through. I wanted to say you talked about Title 22 and the cooling tower limits; could you explain what Title 22 --

A Well --

Q -- regulates?

A -- the portion of Title 22 deals with the use of reclaimed water, specifies what level of treatment reclaimed water must have before it can be used for different purposes, golf course or park irrigation, you know, forage crop irrigation, cooling towers, that sort of thing. And the Title 22 proposed regulations identify that for cooling towers that much have drift eliminators as these do, they must use tertiary treated effluent.

Q Tertiary treated?

A Yes.

Q And the purpose of Title 22 is to be health-protective, am I correct in that?

A Yes.

Q The water that will be used in the cooling towers meets the requirements of Title 22; is that correct?

A Right. The Delta Diablo sanitation district will have to get this water reuse permit from the regional water quality control board and there are provisions in that permit that require them to monitor, ensure that the recipients of this

effluent will be using it properly and then you do inspect as well as monitor the quality of the water they're providing the recipients.

Q I also wanted to go back, you did go through a lot of information very fast and so I wanted to ask a very simple question that requires probably a very complicated answer, but the question if you were a citizen from the city of Antioch and/or if someone from the City of Antioch came to you and said how do I know these projects are not going to adversely affect my water supply, what would you tell them?

A Well, first thing I would say in terms of the proposed Pittsburg District Energy Facility is that the wastewater from the facility will be returned to the Delta Diablo sanitation district which has an existing NPDES permit that is, addresses protection of health and other protection of biological resources, terms of water quality standards, and in terms of my analysis I don't see that supplying effluent to PDEF, PDEF returning their wastewater would cause the district to violate that standard.

The increased concentration issue in terms of impacts on the City of Antioch's water intake, as I said, I'm not qualified to evaluate the surface water dispersion modelling provided by Delta energy center. They had identified a 351 dispersion factor which if accurate would certainly ensure that there'd be no impacts to the City of Antioch's water supply, and given the large amount of dispersion that's identified in the DEC document, even if they're off by a fair amount, there still

probably would be significantly a lot of dispersion going on to ensure that there's not concentrated pollutants in the -- reaching the intake.

However, staff is going to evaluate that further, provide testimony on that.

Q Now the 351-to-one dispersion that you speak of is the modelling that was done for Delta energy center's NPDES permit application?

A Correct. And the modelling did take into account discharge from the Delta Diablo sanitation district with providing, after providing effluent to both power, proposed powerplant projects and receiving the PDEF wastewater back.

Q So included both powerplant projects?

A Yes, it did.

Q Now the portion of the testimony that we will provide in the same time frame as the air quality testimony has to do with that modelling that was done for Delta energy center; is that correct?

A Yes.

Q And what is the nature of the further staff effort with regard to that modelling?

A The expert witness we're engaging will review the information in the permit, the modelling information provided in the applicant's -- excuse me, the application for the NPDES permit, will evaluate whether it's a reasonable approximation of what's likely to occur. There's probably a number of assumptions that were involved in this modelling effort as there

is in any modelling effort. Some of those issues we might not be able to explore until we're into the DEC discovery process.

But for this proposed project we should be able to see whether the modelling represents a reasonable approximation of what will occur.

Q So the Delta energy center modelling shows no impact to water supply, no adverse impact?

A That's how I read it, yes.

Q And our further effort is to check modelling to make sure that it's been done correctly?

A Yes, to verify that.

Q Okay, do you have anything else that you wish to add to your testimony, is there --

Q There is one issue, the City of Antioch had expressed concern about the, I guess you would say, the success of using effluent from the wastewater treatment plant for the two proposed projects, and they're afraid that this will not work and that both projects would be required to use potable water as their water main, water supply for cooling and in case of PDEF for also for the steam cycle.

So I had proposed a condition in supplemental testimony that identifies that, you know, tertiary treated effluent is the primary source and that the City of Pittsburg water is potable source, is a backup and if there's a problem with effluent being provided to the projects they need to notify the energy commission.

My discussions with Delta Diablo sanitation district staff is that there's never been an outage at the wastewater treatment plant and so we don't anticipate that the project would require potable water other than for their domestic requirements.

Q So the questions that the City of Antioch were posing to prior witnesses had to do with the prior impact of this project on potable water supplies; is that correct?

A That is my understanding, either potable treated water or potable quality water in the Contra Costa water district canal.

Q And what do you think that impact will be , simply stated?

A I don't anticipate there will be an impact that the proposed use of tertiary treated effluent is a beneficial use of this effluent and that the project's minimal requirement of potable water should not lead to any impacts on potable water supplies.

Q Is the water that is available from Delta Diablo, in your view, a reliable source?

A Yes.

MR. RATLIFF: The witness is available for questions by others.

MS. GEFTER: Okay, does Applicant have any cross-examination of the witness?

MR. THOMPSON: Just a couple questions.

CROSS-EXAMINATION

BY MR. THOMPSON:

Q Mr. O'Hagan, you mentioned the DEC study that the Delta energy study?

A Yes.

Q Was that the one that was performed by CH2M-Hill?

A Yes.

Q And would you agree with me that CH2M-Hill is a nationally recognized consulting firm with expertise in this area?

A Yes, I would.

Q And for last drilling question here, I've seen you in many cases and I've been in many cases; do you have any estimate of the number of water proposals you've seen from applicants coming through like this? That you've done?

A In terms of using effluent for cooling or --

Q Well, either that or in total, I mean, your experience, I think, is substantial. I'd like to see if you have an estimate of the number of these that you've looked at?

A In terms of the number of powerplants projects I've worked on, the only one -- actually, let me rephrase that.

There was two projects that are proposed using effluent, there's Carson cogeneration facility in Sacramento County that uses effluent for cooling, and then the proposed San Francisco power project which was never constructed also proposed using effluent. But the majority of other projects use fresh water supplies.

Q And of all the projects you've looked at, fresh water, reclaimed water, whatever, do you have any idea what that number is?

A Well, let's see, we have what, eight, nine right now and I don't know, 20.

MR. THOMPSON: 20, great, thank you very much.

THE WITNESS: You bet.

MS. GEFTER: Okay, do we have any cross-examination by CURE of this witness?

MS. POOLE: No.

MS. GEFTER: City of Antioch, do you have cross-examination, please come up to the microphone. Thank you.

MR. FAISST: Dr. William Faisst on behalf of the City of Antioch.

#### CROSS-EXAMINATION

BY MR. FAISST:

Q Mr. O'Hagan, have you reviewed the phase 2 east county water supply study or management study that was prepared by CH2M-Hill and looked at water availability if the reclaimed water is not available, water availability for cooling water, the impact of the Pittsburg District Energy Facility on overall east county water availability if the reclaimed water becomes unavailable?

A To answer your question, yes and no. Yes, I did look at the study; no, I didn't do further evaluation if of whether potential impacts of the PDEF facility running on potable water for a long term.

MS. GEFTER: I'm sorry, could you speak into the microphone when you ask the question. You sort of have to look at us while you ask the question so we can hear you.

BY MR. FAISST:

Q All right, so the short answer is you have not looked into the question of long-term water reliability?

A That's correct.

MR. FAISST: Thank you.

MS. GEFTER: Is that the end of your questions?

MR. FAISST: Yes.

MS. GEFTER: Okay, does CAPIT have any questions?

MS. LAGANO: No, thank you.

MS. GEFTER: Delta energy?

VOICE: No.

MS. GEFTER: Okay, committee.

MR. RATLIFF: I'd like to redirect.

MS. GEFTER: Redirect.

MR. RATLIFF: If this is the right time.

MS. GEFTER: Go ahead.

#### REDIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. O'Hagan, did you not look into the permanent use of potable water by the powerplant because you think that that is an improbable outcome?

A Yes.

Q Will this project require the use of reclaimed water for the powerplant?

A Yes.

Q That is the project description?

A Yes, it is.

Q And that is the project that would be licensed and that would be the requirement that they would have to abide by?

A Yes.

Q On that?

A Yes.

Q Does state law require the use of reclaimed water where such water is available for approximately the same economic cost as potable water?

A Yes, it does.

MR. RATLIFF: Thank you. No other questions.

MS. GEFTER: Any recross?

MR. THOMPSON: No.

MS. GEFTER: Okay, committee.

MR. ROHY: Mr. O'Hagan, I'd like to ask about the metals that are in the water. Do they come with the water that comes originally from the Delta Diablo or does the powerplant add the metals to the water?

THE WITNESS: They come from Delta Diablo sanitation district.

MR. ROHY: Thank you. Are there any metals at all added by the powerplant to the water?

THE WITNESS: No, there're no metals that I'm aware of. There are treatments that are added to the cooling water; there are, that generally it's control acid or base levels, your

PH levels, to ensure that you don't have scaling and biofouling and stuff like that.

MR. ROHY: And those would be added by the powerplant?

THE WITNESS: Yes, but those are generally, like I say, they're dealing with sulfuric acid or other compounds, phosphate and that sort of thing. They're not adding zinc or chromium which used to be used in cooling towers for that purpose. That's no longer used.

MR. ROHY: Thank you. A second question, did you study any possible effects on subsurface water?

THE WITNESS: No. There is concern of in terms of discharge into the Dowest slough area in terms of the Delta energy center, but in terms of the PDEF discharge going to the wastewater treatment plant, no, there isn't any. And this, and I should caveat my concerns about Delta energy center, it's just a concern at this point. We've done no analysis and I don't know if it's at all a concern.

MR. ROHY: Let me make my question larger, since we're looking at soil and water resources in this section. Are there any impacts on subsurface water from the entire project?

THE WITNESS: Ah, okay, no, sources of groundwater contamination from the proposed project would probably come from spills during either construction or operation. Once the facility's constructed, the surface will be, there'll be an impervious cover over much of the property. There is drainage system where they'll have the oil-water separators and so

stormwater being discharged from the site will be generally clean.

During construction, there is concerns like for heavy equipment, vehicle refuelling where there's fuel can be spilled and stuff like, there's best management practices to address that. So in terms of groundwater contamination I, my conclusion was the project would not cause any.

MR. ROHY: Those best management practices are built into the conditions that you have proposed?

THE WITNESS: Yes, the Applicant's identified a number of them in their erosion control plan and their final erosion control plan will be submitted to us and the City of Pittsburgh as part of the -- within the given one of the proposed conditions for certification.

MR. ROHY: Thank you.

THE WITNESS: Thank you.

MS. GEFTER: I have a question regarding the requirement that the project use reclaimed water. Is that Title 22 from the Department of Health Services, is that --

THE WITNESS: Yes.

MS. GEFTER: -- what we're referring to?

THE WITNESS: Yes.

MS. GEFTER: And then again, you've added a condition then that that would require that as part of the project description; is that correct?

THE WITNESS: Yes.

MS. GEFTER: Okay, so there is no question that that would be the preferred water source?

THE WITNESS: Absolutely.

MS. GEFTER: Okay, with respect to soils, we didn't hear much testimony about your soils testimony. You talked in there on page 344 of your testimony on the original staff assessment, talk about the proposal to cap arsenic-contaminated soils at the project and to lay down clean fill. Is this capping process, has this been approved by Department of Toxic Substances Control at this point?

THE WITNESS: Yes, it is.

MS. GEFTER: Okay, where is that plan? Is it, has it been submitted to the commission?

THE WITNESS: Yes, I believe the Applicant provided it in a data response in one of the waste management -- it's in response to one of the waste management data requests, and there's further discussion of that, I believe, in the waste management section of the public health section as well.

But the conclusion which DTSC concurred with is that capping the arsenic soil as well as there's some arsenic-contaminated groundwater would be suitable remediation.

MS. GEFTER: And that would provide adequate protection for the groundwater supply?

THE WITNESS: Yes.

MS. GEFTER: Okay, and then you also in your testimony indicated that the groundwater is already contaminated at the site?

THE WITNESS: Yes, that's correct.

MS. GEFTER: Both the shallow groundwater and the deeper --

THE WITNESS: Right --

MS. GEFTER: -- aquifers; is that correct?

THE WITNESS: -- there's been some detection in samples of arsenic as well as volatiles. The thought is, though, that the arsenic's not coming from being leached out of the soil at the site there, but is probably coming up from up-gradient, groundwater flow from another area offsite. So DTSC was comfortable with the capping proposal.

MS. GEFTER: And that would be also part of the erosion control plan to prevent erosion of contaminated soils; is that connected in some way?

THE WITNESS: Yes, and I believe there's a condition in facility design as well as one in waste management dealing with treating contaminated soil during construction activities. So certainly the erosion control measures that are proposed if not specifically addressing arsenic-contaminated soil do, would help in terms of keeping that material from being moved offsite.

MS. GEFTER: Are there any questions, you have questions?

MR. ELLER: We do.

MS. GEFTER: Yes, you have a couple.

MR. ELLER: You indicate on your testimony at page 34 of the original testimony that a significant amount of fill will

need to be imported to raise the powerplant to 12 feet. You have an estimate amount of fill that will be required?

THE WITNESS: No, I didn't calculate the number because there was a question of discussion with other staff on facility design. There was a question on how much of the existing material at the site would be suitable for fill. So some of that material may have to be removed, and there, without extensive testing nobody would really know how much now.

So even though you have an existing grade, they may have to excavate some of that material, some of that, a lot of the material was brought in there. There is gravel and whatnot there and that material would have to be removed to provide a, I guess, a safe fill base and things. And so I didn't calculate what would be required.

MR. ELLER: Do you have any idea where the fill that would be brought in will come from?

THE WITNESS: No, I don't.

MR. ELLER: Thank you.

MR. PITTARD: Just one question on the potable water as backup supply. You, in your written testimony that you talked about all the different water codes, policies, you know, about the use of reclaimed water, etc. Is there any prohibition in any of those codes, anything that would prohibit the use of potable water as backup water, that speaks to that at all?

THE WITNESS: Yes, oh, as backup water?

MR. PITTARD: Right.

THE WITNESS: No. There is a section in the water code, 13.550 and several following sections, that as Mr. Ratliff had indicated that use of potable water for cooling purposes when reclaimed water was available given certain economic and environmental factors would be considered on a reasonable use of water. Certainly the Applicant's proposing only the use of potable water when the reclaimed water is not available.

And so I certainly feel they're consistent with this water code section.

MR. PITTARD: And so the section doesn't prohibit the use of potable water as a backup in any way?

THE WITNESS: No.

MR. PITTARD: Thanks.

THE WITNESS: No.

MS. GEFTER: I don't know if you can answer this question, perhaps Applicant can, but where in the record could we find the Department of Toxic Substances Control permit approving using capping process for the arsenic-laced soils?

THE WITNESS: I'm not -- I can't answer that right now. My understanding is, is that we didn't have a specific permit from DTSC regarding that but we had report of conversation with DTSC staff indicating they'd approved it, and perhaps in the waste management data responses there might have been a letter and I can't --

MS. GEFTER: Okay --

THE WITNESS: -- substantiate that. I can check on that certainly.

MS. GEFTER: Okay, is there, are there any other questions from the committee?

Any redirect from staff?

MR. RATLIFF: No.

MS. GEFTER: Okay, the witness is excused. Thank you.

THE WITNESS: Thank you.

(Witness excused.)

MS. GEFTER: Staff, you have another witness?

MR. RATLIFF: Yes, staff is going to call Greg Baatrup from the Delta Diablo sanitation district. We do so acknowledging that Mr. Baatrup is -- we're doing so really as convenience to the committee because Mr. Baatrup represents a directly concerned agency similar to the air district.

And we're going to offer Mr. Baatrup the use of any of the slides, but particularly the ones that show the diagram which shows the flows, if you would, if you care to use them, and --

MS. GEFTER: Okay, these are the same slides that Mr. O'Hagan referred to?

MR. RATLIFF: Yes.

MS. GEFTER: Yes, okay, and Mr. -- does Mr. -- could staff provide us with hard copies today?

MR. RATLIFF: Of these slides?

MS. GEFTER: Yes.

MR. RATLIFF: Can we?

MS. WHITE: Yes, we can.

MS. GEFTER: I want to be sure at least that the reporter gets copies to take when --

MR. O'HAGAN: Yes, we'll leave him a set of copies.

MS. GEFTER: Thank you.

MR. RATLIFF: Mr. Baatrup needs to be sworn.

MS. GEFTER: Yes.

Whereupon,

GREG BAATRUP,

having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Mr. Baatrup, first off, you just heard Mr. O'Hagan testify and you're, are you familiar with the written testimony that the staff provided?

A Yes, I am.

Q Do you agree with the staff analysis? Is there anything that you -- all right, let me ask if there's anything you disagree with in terms of the staff analysis?

A We have no disagreement with the staff's analysis.

Q We also heard from Mr. O'Hagan an overview description of the processes of which plants were going to deliver wastewater to the outfall, and I'm reluctant to ask, we've discussed doing this again, but I'm reluctant to ask you to do it again unless you choose to do so; is there anything you would

like to add to that earlier description of the dynamics of how this is all going to work?

A Nothing specific to add, other than that we have been in contact with our staff or with our permit engineer from the regional water quality control board to begin to look at the requirements of bringing back the PDEF flow to a point other than the headworks at the plant, and we're undergoing an evaluation of the requirements to do that right now.

Q The purpose of bringing it back other than to the headworks would be what?

A The wastewater has already been treated to tertiary standards, actually, and when it is blown down back to the treatment plant, there is not, in our opinion, a need to run it through a secondary treatment plant because there'll be no additional treatment gained by that wastewater coming back to the headworks of the plant. It has already met NPDES standards and will continue to meet NPDES standards when it is blown down back to the wastewater treatment plant, regardless of where it is brought back to the plant.

So rather than consuming secondary wastewater treatment plant capacity for this waters, we prefer if possible to find a more logical and less impacting solution.

Q Whether or not you bring it back to the headworks or whether or not you bring it back to the outfall without going through the headworks, is there sufficient capacity in the plant for PDEF?

A Yes, current plant capacity is 16.5 MGD and we last year in our report to the regional board reported that we discharged 13.2 MGD. That's consistent with the testimony that Mr. O'Hagan gave.

Q Do you intend to increase the capacity of the plant?

A We have master plans that show that we will have a requirement to expand the wastewater treatment plant in the future to accommodate the additional growth in our community.

Q Do the, other than the change that you just discussed that you're considering, are there any other changes that these projects would require for Delta Diablo sanitation district?

A I'm not aware of any changes that would be required, this point.

Q When will you receive your general water reuse permit? Or I suppose that's a funny question. When do you hope to receive your general water reuse permit?

A I think as was stated earlier we have a requirement to submit an application for renewal of our NPDES permit in six months ahead of the time which it expires. We submitted in May of 1998 to the regional water quality control board an application for the permit which was scheduled to expire in November of 1998, and we did get an administrative order from the staff that permits us to continue to discharge until the permit is in fact reissued.

We would have hoped that it was issued in November, and we have no expectation as to when the regional board will actually complete its review and issue us a permit.

Q And what is the status of your NPDES permit renewal?

A It's now our application has been made, was made in May of '98, and to our knowledge, the staff has just begun to start considering looking at the permit application at this point. So we're a ways away yet from receiving an approved permit.

Q Is it fair to say that this permit process is a lengthy one?

A It can be a lengthy one, and as we're told in our wastewater treatment community that there are a number of challenges to applications and they are as a result of those challenges taking longer than is normally required. In addition to that, with the changing of the governor, there was a delay due to some reappointments to the regional board.

Q I'll ask you the same question that I asked Mr. O'Hagan. If a person who is a citizen of Antioch asks you whether or not the Antioch water supply is going to be compromised, what are the most salient points that you would tell him or her?

A The powerplant will utilize recycled wastewater from the Delta Diablo plant and would not take potable water supply from the city of Antioch or any of the Contra Costa water district communities, and the Delta Diablo wastewater treatment plant has offer, has operated without interruption in its entire time of existence, dating back to the 1980s, early 1980s.

So there is a high degree of reliability in the operations of the Delta Diablo wastewater treatment plant and

the likelihood that there will be an interruption and an extended interruption of the water supplied by Delta Diablo to the powerplant is very low.

Q Is there anything else you would like to add to your testimony today?

A I have nothing else that I can think of to add right now.

MR. RATLIFF: Okay, the witness is available for cross-examination.

MS. GEFTER: Does the Applicant have cross-examination?

MR. THOMPSON: I just have one question.

CROSS-EXAMINATION

BY MR. THOMPSON:

Q Mr. Baatrup, it's called Delta Diablo and you spoke of your community; would you tell us what communities your facility serves?

A The Delta Diablo service area includes the communities of Antioch, Pittsburg, and the unincorporated area called Bay Point.

MR. THOMPSON: Thank you.

MS. GEFTER: Does the CURE have any cross-examination of the witness?

MS. POOLE: No.

MS. GEFTER: Does City of Antioch? No, questions from Antioch, okay, CAPIT? Delta energy center? Committee.

MR. ROHY: Yes, I have a question. You indicated that you had plans to enlarge your facility over the next few years; are those plans that you have sufficient to take the water that will be returned from both the PDEF and the Delta plant and to supply the needs they have, both cases?

THE WITNESS: To be clear on that, our plans are to expand the wastewater treatment plant for the added growth in our service area, and our master plans call for that to be completed sometime around the year 2007, 2008. Our -- the capacity that we have in our plant now is 3.2, 3.3 million gallons per day, and the only impact to that treatment plant capacity will be in the discharge of PDEF to the headworks of .9 MGD. So there is a significant amount of available capacity remaining, and that that impact by PDEF would be overcome by fees in order to expand the plant in order to accommodate future growth that would be taken up by PDEF.

MR. ROHY: Let me restate my question, then. In any circumstances, is there any circumstance that you can envision between now and the year 2007 when the plans may be realized that there could be insufficient tertiary treated water for both powerplants?

THE WITNESS: No, the analysis that we have gone through for delivering tertiary water to the powerplants under peak conditions, it shows that we can provide power to those -- or, excuse me, water to those powerplants.

MR. ROHY: Thank you.

MS. GEFTER: Okay, I need some information on the process. When the powerplants returned, return the recycled water to sanitation district, do you then recycle the water again or does it go into the outfall?

THE WITNESS: There are two proposals out there for that right now, as it -- the one that is in the AFC is that PDEF would return the water back to the wastewater treatment plant headworks, the very beginning of the plant where all the wastewaters come into the plant. That water would pass through the same treatment processes all wastewaters do and then be sent for tertiary treatment and back to the powerplant. So in essence there is a form of recycling that's occurring in that stream there.

The second proposal is that we could bring the blowdown water back from PDEF to a point after the place where tertiary water is taken off, and then in that case there's no recycling effect of the blowdown water on our wastewater treatment plant.

MS. GEFTER: But then it's all, but it's then sent back to the powerplant --

THE WITNESS: The wastewater flow that comes through our treatment plant would be a portion of it sent to the recycle or the filter plant so that it could be sent to the powerplants for use in cooling towers.

MS. GEFTER: And what about the remaining portion of that water? Does that go into the outfall?

THE WITNESS: That would go into our outfall

and --

MS. GEFTER: Okay.

THE WITNESS: -- would be continued to discharge under our NPDES permit.

MS. GEFTER: Okay, to the New York slough?

THE WITNESS: Yes.

MS. GEFTER: Okay, and is it the -- so we were looking at the cumulative impacts of the portion of the recycled water from PDEF that goes into the outfall combined with the discharge of effluent from the Delta energy center into that New York slough at the same time and that's basically we're looking at, is that --

THE WITNESS: That I -- that is the preferred choice if we can convince the regional board that that is an acceptable solution to be able to bring PDEF waters back to a point further downstream in our wastewater treatment plant.

MS. GEFTER: Okay, I'm sorry, we need to go back through this again. If the water comes back to sanitation district at the headworks of the plant and goes through the whole process, then that water, all of that water then is recycled back to the powerplant?

THE WITNESS: Not all of it would be. some of it would continue on.

MS. GEFTER: There's still portion that continues, now why is that, why isn't all the water just then recycled back to the plant?

THE WITNESS: Because there's more influent flow plus return water back from the PDEF than is taken by both PDEF and DEC. So there's remaining waters left over that are discharged in our outfall.

MS. GEFTER: Okay, are there any redirect of the witness? Okay.

MR. RATLIFF: One question.

REDIRECT EXAMINATION

BY MR. RATLIFF:

Q The -- am I correct in recollecting that for the expansion of the current facility there is an EIR prepared by the district?

A Yes, there's a prepared and certified EIR for the wastewater treatment plant to filter 16.5 MGD of wastewater.

MR. RATLIFF: Thank you.

MS. LAGANO: Paulette Lagano with --

MS. GEFTER: CAPIT.

MS. LAGANO: -- CAPIT.

RECROSS-EXAMINATION

BY MS. LAGANO:

Q I would like to expand on Mr. Rohy's question regarding your capacity, since your expansion is not slated until the year 2007, Pittsburg has been named one of the important pieces of the grid of the powerplant grid in the state of California. If there were to be, let's say, two more powerplants coming would your capacity still be available or would that change your figures?

A I guess I don't quite understand the correlation between the powerplant grid and the wastewater treatment plant capacity.

Q Because they would use reclaimed water. Let's just say that there would be --

A In -- if I can, see if I can answer this and if it covers it.

Q Okay.

A What we're -- will do is provide tertiary treated wastewater to both PDEF and the Delta energy center projects.

Q Right.

A And as I responded to Mr. Rohy there is adequate wastewater in the plant today based on the 13.2 MGD that comes through our plant right now to supply both of those two powerplants. Now as we grow so does our influent and effluent, so we will go beyond what we currently have today and we will have more than is necessary to serve both of these powerplants as time progresses.

Q Okay, but let's say that -- so your capacity right now is adequate for what we have right now?

A Our -- the wastewater flow that we receive is adequate to serve the two powerplant projects, to serve them with recycled wastewater.

MS. LAGANO: Okay, all right. Thank you.

MS. GEFTER: Thank you.

Are there any other questions of the witness from any of the other parties?

No, okay. At this point the witness can be excused.

(Witness excused.)

MS. GEFTER: We're going to take a break. Off the record a moment.

(Whereupon, a brief recess was taken.)

MS. GEFTER: Back on the record.

Going to ask the staff to identify the four charts that Mr. O'Hagan testified to and identify them for the record.

MR. RATLIFF: Well, I think we would like to mark Mr. O'Hagan's charts as exhibit next in order, I think that's 37.

MS. GEFTER: Correct, 37.

MR. RATLIFF: And just call them charts 1, 2, 3 and 4.

MS. GEFTER: Water.

MR. RATLIFF: Water quality. And those charts were an overview map of the geographical area. I think chart 2 was -- correct me if I'm wrong -- the schematic of the flow of water to the outfall with Delta energy center returning its water to the district's outfall. Chart 3 is a similar schematic but with Delta energy center returning its flow to a separate outfall, that of the Dow Chemical Company. And chart 4 was the table indicating the limits of the NPDES permit and the amounts that would actually be discharged with the two plants.

(The document referred to was marked for identification as Exhibit 37.)

MS. GEFTER: Do the parties have copies of these charts?

MR. THOMPSON: We do.

MS. GEFTER: Yes. City of Antioch?

MR. BRANDT: No, I don't.

MS. GEFTER: Could we, someone provide --

MR. THOMPSON: They're on the edge of the table.

MR. RATLIFF: Oh, I didn't have to do that from memory then, I could have actually looked.

MR. THOMPSON: It was a test.

MS. GEFTER: Okay, does any party have any objection to admitting these charts into the record as Exhibit 37?

MR. THOMPSON: None from Applicant.

MS. GEFTER: I, hearing no objection, Exhibit 37 is now admitted into the record.

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(The document referred to,  
having been previously marked  
for identification as  
Exhibit 37, was  
received in evidence.)

MS. GEFTER: Thank you. Staff have any additional witnesses to present on water, soil --

MR. RATLIFF: No.

MS. GEFTER: -- and water resources? Okay, does CURE have any witnesses?

MS. POOLE; No.

MS. GEFTER: No. I understand City of Antioch has a witness that would like to come forward at this point. We need to make room for them.

MR. BRANDT: Good evening, and than you, members of the committee, for hearing us this evening. My name is Joe Brandt, I'm with the City of Antioch. This evening I'd like to ask Dr. William Faisst to provide a brief synopsis of the direct testimony that we submitted on earlier in the process in the water quality issues. Dr. Faisst resume is attached to that package.

MS. GEFTER: Let's go off the record for a minute.

(Interruption.)

(Discussion was held off the record.)

MS. GEFTER: Back on the record.

The witness needs to be sworn.

Whereupon,

WILLIAM FAISST,  
having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

MS. GEFTER: Mr. Brandt.

DIRECT EXAMINATION

BY MR. BRANDT:

Q Dr. Faisst, would you please provide a synopsis of the written testimony that you provided earlier in this process?

A I'm Dr. William Faisst with Brown & Caldwell and my credentials have been submitted previously in the form of my resume. In going forward here today I had submitted written

testimony through the city on four items regarding issue 1.4, we believe that this is really a public health issue and we'd like to defer submitting testimony related to that.

MS. GEFTER: Would you identify issue 1.4?

THE WITNESS: Issue 1.4 related to microbes and viruses from use of tertiary treated wastewater. We would like to defer that testimony until Monday when I understand that the public health testimony will be given.

Before proceeding further, I'd like to reiterate that the City of Antioch is very supportive of using tertiary effluent for powerplant cooling and other appropriate uses.

Regarding issues 4.1 and 4.2, effluent and reclaimed water use, in my testimony I've identified three issues. The first was adverse impact on the city's raw water intake from the San Joaquin river at the north end of Fulton Shipyard Road; the second was adverse impact on delta biota; and the third was adverse impacts on overall regional water supply availability should reclaimed water prove unsatisfactory as a cooling water supply for the Pittsburg District Energy Facility.

Regarding the first point, the city's raw water intake, subsequent to my submitting my testimony, I've had an opportunity to review the dilution analysis that was done for the Delta energy center project, and I have provided more information to CH2M-Hill in the form of the predischage monitoring work for the Delta Diablo outfall that I directed in 1980 and have met with, subsequently met with them and gone over that predischage monitoring in relation to the modelling that

they've done, and there was surprisingly good correlation between the theoretical work and the field work, and we're, we believe that the city's concerns regarding their raw water intake have adequately been addressed.

So we have no further comment regarding that, the city's raw water intake. We believe the issues have been addressed.

Regarding the potential impacts on delta biota, similarly we've had -- we've reviewed the work by CH2M-Hill for the Delta energy center project, and we believe in relation to cumulative impacts that the -- or, the issues that I raised in my testimony have similarly been addressed. We do not expect or we are not fearful of cumulative impacts associated with the modification, the Delta Diablo discharge.

The remaining issue is the question of raw water supply availability. We recognize the position put forward by the Applicant and supported by CEC staff and Delta Diablo that the proposed major water source will be reclaimed water, recycled water, from the Delta Diablo sanitation district plant. We remain concerned from Antioch's perspective if that supply becomes unavailable and they're forced to depend on the City of Pittsburg for potable water for that cooling water which would directly impact the supplies also used by the City of Antioch.

For example, there was the previous study I've referred to, the phase 2 east county water supply management study summary report that was prepared in 1996 by CH2M-Hill, identifies potential -- first of all, it shows no increase in

industrial water use over the 40 years of the study duration, and it also identifies potential shortfalls as early as the year 2010 if drought conditions were to occur.

So the city is concerned about its water supply availability. I had suggested a suggest -- proposed a condition of certification that the Applicant should provide an alternative water supply to the plant to ensure the city's ability to supply its residents is not impaired or impacted by unforeseen circumstances which would prevent the use of the Delta Diablo sanitation district reclaimed water as a cooling water supply.

In looking at the situation further, an alternative to that condition would be that the Applicant review the east county water supply management study summary report in detail and also confirm the supply availability for Contra Costa water district and perhaps be able to demonstrate that our concerns are unfounded and that this, even in drought years, owing to the developments that may have occurred since that study was completed, that there would in fact be adequate water available. The bottom line here is city wants assurance that it's supply will be unimpaired and its residents won't be adversely affected.

The -- and that concern, we recognize and appreciate the CEC staff proposal of a condition of certification regarding not operating the plant for an extended duration on a potable water supply, but we also would raise the practical question of practicality. If someone has invested two or three hundred

million dollars in building a powerplant some unforeseen mishap makes the reclaimed water either unavailable or unacceptable, what are the chances within the political realities of the world of somebody shutting down the powerplant after two weeks because of the -- by saying that the potable water supply isn't, cannot be used further and they have to go back through a CEC process to get approval.

And I think that summarizes my -- the essence of my testimony.

I'd be pleased to entertain questions.

MS. GEFTER: Thank you.

BY MR. BRANDT:

Q Mr. Faisst, if I might, testimony this evening has indicated that the combined Delta energy center and PDEF facility will take roughly nine million gallons a day; is that correct?

A Yes.

Q Can you tell me what the population of the city of Antioch is?

A The city of Antioch currently has a population of about 70,000. The buildup population which is expected to occur about 2030 is on the order of 125,000, and the ultimate average day water supply for the city, the current water average annual water supply for the city is about 15 MGD. So they're talking about a water demand, at least on a reclaimed water basis, that's 60 percent of the city's demand, and the city's ultimate demand is going to average annual demand is projected, grow out

to about 25 MGD and their peak summer demands would be on the order of 45 to 50 MGD.

So in the event that the reclaimed water were unavailable, the demand for the power facilities could represent a substantial portion of water resources that the city sees it needing in the future, based on planned and approved growth.

MR. BRANDT: We're growing faster than I thought. We're actually a city of 80,000, but, yes, that's --

BY MR. BRANDT:

Q The other question that I would have is what is the average winter day consumption for the city of Antioch for treated water?

A I believe right now it's running about nine MGD.

Q Or about the same amount as these combined plants would take on an average day; is that correct?

A Yes, sir.

Q There is a benefit to using raw water, I'll call it, water from the Contra Costa water canal, for instance, rather than wastewater. Is it fair to say that that's roughly a 60 percent benefit?

A Based on the information we saw from the Delta energy center, it looks like it may be on that order. The lower salinity would allow them more cycles through the cooling tower.

Q So stretching my imagination a bit here, if I have a city of 80,000 population, taking nine million gallons a day and 60 percent of that is what, 5.4 million gallons a day, I'm looking at adding, if this water goes on to Contra Costa water

district, I'm looking at adding a city of what, roughly 40,000 population to an area where it didn't exist previously; is that correct?

A Yes, sir.

MR. BRANDT: Thank you.

I have no further questions. Dr. Faisst is available for cross-examination.

MS. GEFTER: Thank you.

Applicant, do you have cross-examination of the witness?

MR. THOMPSON: Just a couple questions.

CROSS-EXAMINATION

BY MR. THOMPSON:

Q Do you have Exhibit 37 in front of you?

A Yes, sir.

Q I see the city of Antioch here; are any of the facilities that are designated here within the city of Antioch? Imperial West Chemical, for example?

A I'm not sure the exact extent of the city limit lines. They're probably within the sphere of influence but I'm not sure if they're actually inside the city limit line as they currently exist on the east side of town.

Q And Gaylord Container, do you know if that's in the city of Antioch?

A Mr. Brandt might know.

MR. BRANDT: A little unusual. May I testify?

MS. GEFTER: Yes, Mr. Brandt is a representative of City of Antioch and if you have knowledge of the question and you can testify from your own expertise, go ahead.

MR. BRANDT: These facilities that are shown on the map are all within Contra Costa County. One or two of them do take our treated water from the city.

MS. GEFTER: And what is your position with City of Antioch?

MR. BRANDT: City engineer, director of public works.

MS. GEFTER: Okay, director of public works of City of Antioch, so parties have no objection to Mr. Brandt testifying?

Okay, no objection -- oh, that's true, Mr. Brandt has not been sworn. Let us swear him in as well, okay.

(Witness excused.)

Whereupon,

JOE BRANDT,

having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

MS. GEFTER: Thank you. Your testimony now is also part of the record, okay.

#### DIRECT EXAMINATION

BY MR. THOMPSON:

Q Did you say the Gaylord Container, is that within the city of Antioch?

A Gaylord, I believe, is in the county; everything north of Wilbur Avenue is in the county.

Q Do any of these facilities in Antioch or in the county area close to Antioch use reclaimed water?

A I don't believe so.

Q Is there a powerplant at the Gaylord Container?

A Not that I'm aware of. There's one across the street from that in Antioch.

Q Does that powerplant in Antioch use reclaimed water?

A No, not that I'm aware of.

Q Where does it buy its water, do you know?

A It purchases its treated water from the City of Antioch, and I believe it has a couple of wells or it is trying to get a permit for a couple of wells.

MR. THOMPSON: Thank you.

That's all I have. Thank you.

MS. GEFTER: Any cross-examination from staff?

MR. RATLIFF: Yes, I would like to ask a few questions, if I could.

(Witness excused.)

Whereupon,

WILLIAM FAISST,

having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:

CROSS-EXAMINATION

BY MR. RATLIFF:

Q Is it Mr. Faisst? Mr. Faisst, Dr. Faisst, I'm sorry, your testimony and your questions seem to indicate a skepticism about the reliability of the recycled water supply. And I

wanted to ask you if, did you hear the testimony of Mr. Baatrup that the wastewater treatment district is essentially a very reliable supply and is operating continuously and in fact I think must operate continuously to meet the requirements of the city, the district's NPDES permit?

A Yes, I understand that.

Q Do you have any reason to doubt the reliability of Delta Diablo?

A To the best of my knowledge, Delta Diablo is an extremely well-operated facility, but in the guise of a publicly-owned treatment works operating with biological processes, I could go into literature and find examples around the country through, where through situations beyond their control, illegal dumping of hazardous materials into the sewers, that sort of thing, it's very easy with a biological treatment works to put the treatment works out of commission. This, and I'm, because of, there, you can kill the bugs, the treatment process, the quality of the effluent could be severely degraded.

Delta Diablo has a good industrial pretreatment program to the best of my knowledge and it's a very well-operated and -staffed plant, but things do happen. Our concern on the part of the City of Antioch was to provide assurance to the residents that their water supply was going to be protected and not interrupted or not degraded or reduced through events that were beyond the control of the city.

Q In the instances that you're talking about where -- which you describe, I think, as unusual, I

believe -- how long were the treatment facilities out of operation?

A In the case of -- it would depend on what the discharge was and how it occurred. I could foresee circumstances where you could be off line for several weeks depending on what it was and how it was being introduced into the system.

Q So it could be as much as several weeks?

A I'm --

Q But it not permanent, I take it?

A No, I would not, short of somebody putting gasoline in the sewers and the plant blowing up, I would not foresee it being a permanent situation.

Q Okay, what is the current City of Antioch water supply?

A The City of Antioch currently directly diverts from the San Joaquin river when the chloride levels are under 250 milligrams per liter and that has varied from as few as, I think, seven days or something during 1990 during the worst part of the drought, and there have been years where they've been able to go yearround. But, and the typical long-term average, I think is about 150 days per year.

The city also diverts water from the Contra Costa canal. They can divert from the river only at a rate of 16 MGD based on current facilities. Their peak requirements are up to 26, so they divert, a maximum day situation, they divert

somewhere between 10 and 26 MGD from the Contra Costa water district, Contra Costa canal.

They have a small amount of water that they gain from local watersheds, and they also have a couple of groundwater wells that are presently inactive.

Q Are you familiar with the legal basis of their right to that water supply?

A For the -- which part of it, all of it?

Q Any or all of it.

A The City of Antioch has been a riparian diverter from the San Joaquin river since 1871. They have what's in the industry is referred to as a pre-1914 right. They are a contracted customer to the Contra Costa water district which has a Bureau of Reclamation contract that I think provides up to 195,000 acre-feet per year.

Their -- they have a diversion right for the small amount of runoff they get into the municipal reservoir, that I think has been established with State Water Resources Control Board. And they have drilled wells to extract groundwater under a municipal park.

Q Okay, would it be safe to say that the greatest amount of the water then is by contract?

A It's varied, it varies probably from in the current situation it probably varies from, contract water varies anywhere from 40 to 100 percent depending on the delta outflow condition.

Q What would be the average annual, if you could just guess; I know you couldn't give me an exact number, but --

A In a long-term average, my guess, if the river's available, 150 days a year, so they would probably be getting on the average a half to two thirds of their water from as under contract water.

Q And that's pursuant to contract?

A With the Contra Costa, through their, the Contra costa water district.

Q I see. Is there under, is there some scenario in which you perceive that that contract would be abrogated if Delta Diablo were out of commission?

A It wouldn't affect their ability to divert water from the Contra Costa canal is not affected by the operation, Delta Diablo sanitation district. That's downstream. It's after you flush.

Q Okay, but I think you're suggesting that if Delta Diablo were not functioning, they might be a competing water user; is that correct?

A That the Pittsburg District Energy Facility through the City of Pittsburg --

Q I'm sorry, I mean PDEF, not Delta Diablo.

A Yes, they could, the scenario that's outlined, I think, in their application for certification is under an emergency situation they would be drawing water out of the -- indirectly out of the Contra costa canal because it would be coming through the city of Pittsburg.

Q Would their rights be subordinate to your right, your contractual right?

A I don't know how the Contra Costa water district would go forward and divide additional demand generally among the customers, they've divided, have asked proportional cutbacks by all parties during a drought situation. I don't know, I think this particular issue would need to be explored with the water district on a case-by-case basis.

Q Would it be fair to say that your concern, though, is over the possible short-term outages of the Delta Diablo facility?

A Yes, sir --

Q During a drought season?

A -- yes. Yes, sir.

MR. RATLIFF: I have -- that's all my questions.

MS. GEFTER: Is there any cross-examination from any other witness -- for, from this witness from any other party?

Okay, is there any redirect, Mr. Brandt, do have any questions of your witness?

MR. BRANDT: No, ma'am, thank you.

MS. GEFTER: Okay, at this point the witness is excused. Thank you very much.

THE WITNESS: Thank you.

(Witness excused.)

MS. GEFTER: Okay, are there any other witnesses from any other party this evening on the topic of soil and water resources?

Does the committee have any questions?

Okay, I think we can wind up our testimony on soil and water resources at this point, unless any party has any other evidence they would like to submit.

Okay, we will then go on to the next topic, which is socioeconomics, and does the reporter need a break at this point or can you keep going? Okay, so we'll keep going and go on to socioeconomics.

The Applicant, do you have a witness?

MR. THOMPSON: We do. The Applicant would like to call Shabnam Barati, please.

Whereupon,

SHABNAM BARATI,

having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Ms. Barati, would you please state your name for the record?

A Shabnam Barati.

Q Are you the same Ms. Barati that submitted prepared testimony which is contained in Exhibit 30 to this proceeding?

A Yes, I am.

Q And today you are a witness in the area of socioeconomics; is that correct?

A That's right.

Q And you are here to sponsor Exhibit 1, section 1-5.10, socioeconomics, and 4, responses to commission staff data requests, socioeconomic data requests 1, 2, 3 and 4, all of which are contained in our Exhibit 2; is that correct?

A That's right.

Q You have any additions, corrections or deletions to make to that material?

A No, I don't.

Q Would you please briefly summarize your testimony for the committee?

A We conducted the socioeconomic impact analysis for this project using CEC guidelines for AFC preparation. And the focus of that study was any demographic or economic changes that would result if this project is implemented. And sort of as a first step we looked at what should be the study area for this analysis, and we based on previous experience and knowledge of these powerplants, we determined that the construction phase is typically more critical and therefore we defined a study area based on construction commuting patterns to include a four-county study area, Alameda, Solano, San Joaquin and Contra Costa Counties.

Having defined the study area, then we moved on to gather information on baseline conditions relative to demographic conditions. We went to ABAG projections, we went to the census, and then for employment and workforce-related information, we went to sources such as the Employment Development Division of California state, and then we went to

the service providers for information related to fire, police and so forth.

And once the baseline information was gathered, we proceeded to look at project data to see whether it would result in any impacts. It was a comparison of that data with baseline. And there the focus was mainly on the size of the construction workforce, the average and the peak, and the kinds of skills in which you need workers to build this powerplant. And the key factor there was to see whether they are available in the study area or are they not there.

And the study, the comparison of the data showed that there was enough labor in the right skill categories in the study area, and therefore we concluded that there would be an influx of nonlocal population, workers and their families, into the area. That is typically the most critical, that triggers other impacts for socioeconomics. So given that we concluded that there would not be an influx, we also concluded that there would be no impact to services such as police and so forth related to the population increase.

Finally, we looked at economic impacts from the project, and they turn out to be benefits mainly in terms of construction payroll and income generated by that in the region, and the operations payroll and local purchasing during construction of the project or operations of the project, that would also have an income multiplier effect. And then there would probably be tax revenues that would also accrue.

So that in a nutshell was the analysis we conducted for this project.

Q Thank you.

A Completes my testimony.

Q And have you reviewed the socioeconomic section of the staff assessment?

A I have, yes.

Q And the conditions of certification and verifications thereto?

A Yes.

Q And do you recommend to the Pittsburgh District Energy Facility that they accept those conditions as being reasonable?

A Yes.

MR. THOMPSON: Thank you.

Ms. Barati is tendered for cross-examination.

MS. GEFTER: Staff have questions of the witness?

MR. RATLIFF: No.

MS. GEFTER: Does CURE have questions of this witness?

MS. POOLE: No.

MS. GEFTER: City of Antioch? Does CAPIT have questions of the witness?

MS. LAGANO: Yes.

MS. GEFTER: Yes? Come forward.

MS. LAGANO: Paulette Lagano with CAPIT.

CROSS-EXAMINATION

BY MS. LAGANO:

Q Based on the projection for the construction, is there, are there any agreements with the local unions regarding the hiring of locals?

A I'm going to have to defer that.

MS. LAGANO: Okay, is that beyond her scope? I'm sorry.

MR. THOMPSON: I think it is beyond her scope. We have a witness coming up from the unions, and if they can't answer, we can take a stab at it later.

MS. LAGANO: Thank you.

MR. THOMPSON: Is that acceptable?

MS. LAGANO: Sure.

MS. GEFTER: Delta energy center, do you have any questions?

VOICE: No.

MS. GEFTER: Okay, committee.

Okay, moving on to staff's witness.

(Witness excused.)

MR. RATLIFF: The staff witness is Amanda Stennick.  
Whereupon,

AMANDA STENNICK,  
having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Ms. Stennick, did you prepare the testimony in the staff assessment titled Socioeconomics?

A Yes, I did.

Q And did you prepare the supplemental testimony as well?

A Yes, I did.

Q Is that testimony true and correct, to the best of your knowledge?

A Yes, it is, to the best of my knowledge.

Q Any changes you would like to make to it?

A I have one minor change. On April 21st, this is regarding the Board of Equalization's position on unitary taxing of powerplants, on April 21st the Board of Equalization property tax committee adopted to assess only companies that own generation facilities with a certificate of public convenience and necessity and all other facilities will be assessed locally and that would include the PDEF project.

Q So you're updating us with additional information --

A That, yes --

Q -- concerning tax assessment?

A -- yes.

Q And powerplants that receive certificates of public necessity are --

A Those are issued by the California Public Utilities Commission and not --

Q Right --

A -- by the energy commission.

Q -- and that would not include merchant plants of the nature that this plant is; is that correct?

A That's correct.

Q Okay, so all of those plants such as PDEF would be locally assessed; is that correct?

A That's correct.

Q Okay, could you summarize your testimony briefly?

A Yes. This socioeconomic impact analysis evaluates the effect of project-related population changes on schools, medical and protective services, public utilities and other public services and the fiscal and physical capability of local government agencies to meet the needs of project-related changes in the population.

To begin this analysis, a summary of this analysis, I define the study area, and I agree with the information that was contained in the AFC and with the Applicant's testimony that the most important thing to look at initially is the study area for purposes of deriving the construction labor pool, and that's often done, take, that's often done within an hour's or two hours' commuting distance from the project site.

So for the local area, for construction, the local area consists of Contra Costa, Solano, Alameda and San Joaquin Counties. And for purposes of determining other socioeconomic impacts or the potential for socioeconomic impacts to occur, the study area is the -- are the cities of Pittsburg and Antioch because of their close proximity and degree of urbanization within those two cities and the services they provide.

I analyzed the potential of project-related population impacts in housing, schools, fire, police and medical services. I based my analysis on information contained in the AFC. I based my analysis on information from the Department of finance, demographic research, information obtained from the Association of Bay Area Governments, and I conferred with representatives of police and fire from the county, Contra Costa County, and the city of, Cities of Pittsburg and Antioch.

Analysis in these areas and discussions with various representatives of agencies that I just mentioned indicate that there will be no adverse impacts from this project, and primarily that's due to the availability of construction labor within an hour's commuting distance of the project.

I propose two conditions of certification. My conclusion was there would be no adverse impacts to the communities of Pittsburg and Antioch and because the Applicant has proposed economic benefits to the project area, I propose a condition of certification that requires the project owner and its contractors and subcontractors to recruit employees and procure materials and supplies locally. And in addition, conditions of certification require the project owner to pay the statutory development fees for the Pittsburg unified school district and the Contra Costa fire department as required at the time of filing for the in lieu building permit with the City of Pittsburg building department.

That concludes my testimony.

MR. RATLIFF: Thank you.

The witness is available for cross-examination.

MS. GEFTER: The Applicant have cross-examination?

MR. THOMPSON: Only one.

CROSS-EXAMINATION

BY MR. THOMPSON:

Q The local hire, am I correct that that's to the extent allowed by law?

A That's correct.

MR. THOMPSON: That's all I have, by the way. Thank you very much for the information that you gave us fairly early on, on the assessment that you just reported on of April 21, appreciate that. All I have.

MS. GEFTER: Does CURE have cross-examination for the witness?

MS. POOLE: No.

MS. GEFTER: Okay, City of Antioch?

No. CAPIT, no. Delta, no. Committee.

MR. ROHY: Just a short question, Ms. Stennick. Are the fees that you mentioned, the end of your oral testimony there, usual and customary fees? Are they usual and customary fees?

THE WITNESS: Yes, they're based on the square footage of the project. There's statutory fees required for impacts to school districts.

MR. ROHY: Thank you.

MS. GEFTER: And in SOCIO-2 where you have proposed the condition for the statutory development fee, is -- it does not specific, you know, identify what that fee is in the language of the condition. Is this a term of art? It just says statutory development fee is required for in lieu building permit with the City of Pittsburgh?

THE WITNESS: Let me refer to the testimony to answer that question. Are you referring to the in lieu building permit?

MS. GEFTER: Yes, that is SOCIO-2, proposed conditions.

THE WITNESS: There are fees that the -- when a project is constructed within the city of Pittsburgh they're required to get a building permit. Some of the fees from that building permit go to various districts, whether it be the school district or the fire district. That's all that that is.

MS. GEFTER: So this condition would cover --

THE WITNESS: That's correct.

MS. GEFTER: -- things that you mentioned?

THE WITNESS: That's correct.

MS. GEFTER: Okay, there also, attached to your errata testimony was the alliance and development agreement?

THE WITNESS: Yes.

MS. GEFTER: Okay, and this was it seems that your testimony indicates this agreement was attached to your -- attached as in response to City of Antioch's concern --

THE WITNESS: No --

MS. GEFTER: -- not being included in receiving any profits or any benefits from the alliance agreement?

THE WITNESS: Well, initially this alliance and development agreement was attached at the request of the Applicant that that be entered into the testimony and part of the analysis that was done in this area.

MS. GEFTER: And that was the purpose of your attaching it? Was there any other testimony that you had related to this particular document?

THE WITNESS: No. There's very little analysis that can be done on this at this point and it's beyond the scope of a socioeconomic analysis to determine the positive economic benefits of a project.

MS. GEFTER: I would like to ask the representative of City of Antioch whether the city still has that concern regarding the alliance agreement?

MR. BRANDT: We have a concern -- Joe Brandt -- concern with the impacts on the city of Antioch and the mitigation to those concerns but we had decided to deal with it in another manner.

MS. GEFTER: Okay.

MR. BRANDT: Thank you.

MS. GEFTER: Thank you. Okay, and I think the alliance agreement that we're referring to is Exhibit 10, which has already been admitted into the record.

Is there any redirect of the witness?

MR. RATLIFF: No.

MS. GEFTER: The witness is -- oh, we do have questions, committee.

MR. PITTARD: I need to raise a question Commissioner Moore asked me to ask you for some basically -- excuse me, for some ideas. Earlier today during the visual resources testimony, Commissioner Moore raised a concern about some of the mitigation measures which are landscaping, and as the lead agency we have responsibility for doing compliance monitoring and enforcement of all mitigation measures that we require of an Applicant.

His concern was that there wasn't a specific mechanism to ensure that the landscaping mitigation measures were in fact maintained. There's some, we had some kind of preliminary discussion with Mr. Wehn and others about, you know, how that might be taken care of. The city might, it might come out of the city's general fund, etc. But it's not, wasn't clear and we haven't really pinned it down. So one of his goals is, during these hearings, is to kind of pin that down.

And so his question that, question he asked me to ask you is would you have any ideas about the best mechanism that we could use to ensure that, you know, funds are set aside to maintain the landscaping mitigation?

THE WITNESS: Well, certainly the revenue from property tax. Property taxes on the project will go to the redevelopment agency. It could be a matter of the city determining a line item for their budget and setting aside a

certain portion of those funds to go specifically for landscape and maintenance.

Perhaps the alliance and development agreement could be amended to include some language to that effect. There's the possibility of writing a condition in either the visual section, the land use section, or socio section, whichever would be more appropriate to that, that would state that language very clearly.

MR. PITTARD: Thank you. I think then other parties should be thinking about how we might use all that, too, and I know Commissioner Moore will raise it again during the land use topic, at our hearing on Tuesday, and as I understand it, the city will be present at that time as well.

So if you have other ideas or you can think of other mechanisms between now and then, please, you know, get them back to us.

THE WITNESS: Okay.

MR. PITTARD: Thank you.

THE WITNESS: Thank you.

MS. GEFTER: I do have another question that was not touched on in your oral testimony regarding environmental justice screening --

THE WITNESS: Yes.

MS. GEFTER: -- analysis that you conducted. What was the conclusion whether there were going to be any impacts or any environmental justice?

THE WITNESS: Based on the census data, the analysis or the screening for populations that would be subject to environmental justice concerns were not present. So there was not a significant population in either minority populations or racial populations to constitute a concern for environmental justice. And there have not been any, to the best of my knowledge, no concerns from groups within the city of Pittsburgh or folks who live adjacent to the proposed site that have raised any questions regarding environmental justice.

MS. GEFTER: Okay, thank you. And then I may have misheard you when you were -- mentioned the availability of construction labor so there would be no impacts during the construction period. Is that within two hours of the city of Pittsburgh or one hour?

THE WITNESS: It's with generally, this analysis, it's within one hour's commute of the project site. One hour or less.

MS. GEFTER: Okay, thank you.

All right. Are there any other questions of the witness?

Okay, witness is now excused. Thank you very much.

THE WITNESS: Thank you.

(Witness excused.)

MS. GEFTER: CURE has a witness on socioeconomics, if you'd like to bring your witness forward. Thank you.

MS. POOLE: Kate Poole from CURE. I'd like to call Greg Feere to the stand. We have an exhibit that wasn't

included on the exhibit list that I would like to pass out now and I think it would be Exhibit 38.

MS. GEFTER: Right, the next in line is Exhibit 38. You could identify this for the record and then testify.

(The document referred to was marked for identification as Exhibit 38.)

MS. POOLE: We could call it information regarding nonunion apprentice programs. And the witness needs to be sworn.

MS. GEFTER: Exhibit 38 is information regarding nonunion apprentice programs, sponsored by CURE. Thank you.

Okay, could you swear the witness, Mr. Reporter. Thank you. Whereupon,

GREG FEERE,  
having been first duly sworn, was called as a witness herein, and was examined and testified as follows:

DIRECT EXAMINATION

BY MS. POOLE:

Q Would you please state your name and job title for the record?

A Greg Feere. I'm the chief executive officer for the Contra Costa Building Construction Trades Council.

Q And did you sponsor prepared testimony for CURE dated April 12th, 1999?

A Yes, I did.

Q Would you like to make any changes to that prepared testimony?

A Yes, there is one minor change at the very end, there was in regard to the operating engineers and their scholarship programs, and the operating engineers, though not a member of CURE, are affiliate of the Contra Costa Building Construction Trades Council.

Q And I believe that's on page 7 of the prepared testimony?

A I think that's correct.

Q Would you like to summarize your testimony for the record, please?

A Kind of a good one because the project has a tremendous amount of social and economic benefits and in the eyes of the building trades. We've entered into what's called a project labor agreement with Enron and the building trades. It's, you know, a project labor agreement in a real nutshell is a stabilization of work rules with no strikes or lockouts so the project can go on forward on schedule, on budget and indeed on safely.

What that does to the workforce and specifically for the building trades, of course, is that the workers that'll be on that job will be paid a living wage, they'll be provided with health benefits and they have a pension to retire on with dignity. As you go forward with this, it provides also opportunities for apprenticeships. The reason that we presented that exhibit before you, some time ago I did a freedom of

information request on the nonunion sector, and you probably imagine I'm very biased when it comes to apprentices and training and because we invest a tremendous amount of money as you can see from the statements in here. We spend anywhere from 25 up to 40 thousand dollars throughout an apprenticeship for a building trades man or woman, and we put a lot of time, we put a lot of effort into doing that.

And when we made the comparison between the union and nonunion, what you have there on page 1, for northern California, the associated building and construction trades or associated building contractors, I asked for their records over 10 years, and you have 116 applicants, 116 cancellations. Women, six women, six cancellations. African-Americans, never taken in one.

So when it comes down to building quality projects and building them safely and on schedule, on budget with the best technology and available, we are the only people that train. There has never been a nonunion worker trained through an apprenticeship to a journey-level person in Contra Costa County, ever, and that's probably the reason why we do every major project in the county.

We have a very large workforce, we've done projects, similar projects to this in the community. We've been very successful with the recruitment of women, minorities and economically disadvantaged. We've set up the first outreach program in the city of Richmond. It initially was Richmond community outreach and then it became first source because we

felt that it was important to expand from construction trades to also to secondary jobs which are equally important and because everybody doesn't want to be a construction worker.

So in talking with the owners and the -- our contractors, working together collectively, we made the request that when you're recruiting a secretary, payroll clerk, or a receptionist, why not bring them from the community that you're working in.

And the response that I got from our contractors is, you know, that had been doing that was nobody ever asked us. And it was a simple thing, well, we're asking you. And it was something that we've talked with Enron about and everybody's in full agreement with that. I think we'll be able to work successfully in the city of Pittsburg. We have an excellent long-term working relationship with the minority community. We've worked with them in the past on projects here. We keep them apprised of apprenticeship openings, and I think we'll be able to achieve everything that needs to be achieved in regard to local jobs and the local opportunities.

And we have a lot of people that as everybody talks about construction in the area, there's three areas that we cover, is residential, commercial and industrial. And right now, except for the refineries catching on fire and blowing up, there's not a lot of industrial work in the area, and some of our locals are totally dependent on industrial work. And as a matter of fact, we have people on the out-of-work list that are really just crossing their fingers and hoping this project will

go forward as quickly as possible, and they're looking forward to going to work.

Same token, we have people that are working out of the area that live in these areas that would love to work here so they don't have to go to commute, and when you talk about an hour commute, that can be 22 miles on highway 4, which I commute, and that's what it comes down to sometimes. so you don't have to go very far to make an hour commute in this county.

But I think overall the project is going to be phenomenal for the community, the working relationship and the cooperation that I've seen from Enron is fantastic, and I think it's going to be a win-win for the community.

Q Ms. Lagano of CAPIT asked a question earlier about the hiring of local construction workers on the project; can you address that?

A The way we do that and, you know, we're regulated by the State of California about actually hiring people off the out-of-work list, and you can't take somebody from the bottom and skip somebody that's been waiting on the top. But what the local unions have is a name hire provision, and so that you can hire one or two people off the top and then name-hire somebody directly. And that's how we legally address that issue.

And like I said, I've heard from a number of local wives. I live in Antioch and they would like to have their husbands working closer to home. So we fully intend to work in cooperation with those wives' request and the unions and Enron

to make sure that we get out local people from east county here in to work.

MS. POOLE: Mr. Feere is available for cross.

MS. GEFTER: Thank you. Does Applicant have any cross-examination?

MR. THOMPSON: I just have one question.

CROSS-EXAMINATION

BY MR. THOMPSON:

Q Mr. Feere, I suspect you've heard both the Applicant and Ms. Stennick representing the staff say that there are adequate workers within one hour of the project; do you agree with that?

A Oh, most definitely. I think we have somewhere in the neighborhood of probably 20 to 25 thousand building trades in Contra Costa, and we have literally thousands in east county, I mean, this is a very blue-collar area. So we've done projects substantially bigger than this, we just finished a clean fuels project with the refinery, that's with Los Vaqueros, and that was about \$4 billion worth of construction. So we were able to meet all those needs, and this project is substantially smaller, and I don't see any problems whatsoever in addressing the needs.

MR. THOMPSON: Thank you.

MS. GEFTER: does staff have any cross-examination?

MR. RATLIFF: No.

MS. GEFTER: City of Antioch? CAPIT? Delta energy? Committee?

Thank you very --

THE WITNESS: Okay, thank you.

MS. GEFTER: -- much for your testimony. The witness is excused.

(Witness excused.)

MS. GEFTER: Does any other party have a witness on socioeconomics?

Oh, we need to --

MS. POOLE: Do you want me to move my exhibits into --

MS. GEFTER: Yes --

MS. POOLE: -- evidence now?

MS. GEFTER: -- moving too quickly. Exhibit 38 which has been identified.

MS. POOLE: As well as Exhibit 34, which is Mr. Feere's prepared testimony.

MS. GEFTER: Yes, okay, is there any objection from any party to admission of Exhibits 34 and 38 into the record?

MR. RATLIFF: No.

MS. GEFTER: Okay, hearing no objection, both Exhibits 34 and 38 are admitted into the record.

(The documents referred to,  
having been previously marked  
for identification as  
Exhibits 34 and 38,  
were received in evidence.)

MS. GEFTER: The next topic is worker safety and fire protection. Before we go on we're going to take a short break, about five minutes. We'll reconvene at 9:00 o'clock.

(Whereupon, a brief recess was taken.)

MS. GEFTER: Back on the record.

MR. THOMPSON: Thank you. In the area of worker safety and fire protection, Applicant would like to call Ms. Denise Clendening, who has not been sworn. Whereupon,

DENISE CLENDENING,  
having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Would you please state your name for the record?

A Denise Clendening.

Q Are you the same Denise Clendening that has submitted prepared testimony contained in Exhibit 30 in this proceeding?

A Yes, I am.

Q And today you sponsoring Exhibit 1-5.17 --

A Correct.

Q -- in the worker safety section of the AFC?

A Yes, I am.

Q You have any additions, corrections or changes to that material?

A No, I do not.

Q Would you please briefly summarize your testimony?

A The section that I wrote was developed using the CEC guidelines, and also the most recent version of Title 8 from California code of regulations dealing with industrial

relations. The final construction and operational health and safety plans will be developed following all the current health and safety plans and codes of safe practices.

Our conclusion was that there will be no significant adverse impact to worker safety and fire protection. There are no impacts anticipated, and that is the conclusion of my testimony.

Q Have you had an -- have you had occasion to review the staff testimony contained in the staff analysis in your area?

A Yes, I have.

Q Including the conditions of certification and the verification thereto?

A Yes, I have.

Q And do you recommend that the Pittsburgh District Energy Facility accept those conditions and verifications?

A Yes, I do.

MR. THOMPSON: Thank you.

Ms. Clendening is proffered for cross-examination.

MS. GEFTER: Thank you. Does staff have any cross-examination?

MR. RATLIFF: No.

MS. GEFTER: Do any of the other parties have cross-examination of this witness?

Hearing none, does the committee?

MR. ROHY: My question applies to the worker safety with regard to noise. Has that been, in your opinion, satisfactorily addressed by the Applicant?

THE WITNESS: Yes, it has, and when we write the final plans those will be addressed in detail.

MR. ROHY: Thank you.

MS. GEFTER: Any other questions from the committee?

Okay, the witness can be excused.

(Witness excused.)

MR. THOMPSON: Thank you. I have one more witness very briefly in the worker safety area, Mr. Joe Patch.

Mr. Patch has been previously sworn.

Whereupon,

JOE PATCH,

having been previously duly sworn, was recalled as a witness herein, and was examined and testified further as follows:

DIRECT EXAMINATION

BY MR. THOMPSON:

Q Mr. Patch, are the same Joe Patch that has testified previously in this proceeding?

A Yes.

Q And today, tonight, under, you are testifying under worker safety to Exhibit 2, the response of the Applicant to staff data request 2, worker safety-1, which deals with access for emergency response teams?

A Yes.

Q Would you very briefly summarize the response to that data request?

A The response, the plant layout as designed, access to the site was initially conceived and still remains such that the

ability for firefighting equipment as well as emergency vehicles, ambulances, whatnot, have access into, through and around the site.

MR. THOMPSON: Thank you.

Mr. Patch is tendered for cross-examination.

MS. GEFTER: Staff have any questions of the witness?

MR. RATLIFF: No.

MS. GEFTER: Okay, any cross-examination from any other party present?

Hearing none, does committee have any questions?

Okay, witness may be excused.

(Witness excused.)

MR. THOMPSON: That concludes Applicant's direct, that concludes Applicant's showing on worker safety and fire protection.

MS. GEFTER: Thank you. Staff, want to introduce your witness now?

MR. RATLIFF: The staff witness is Ellen Townsend-Smith.

MS. GEFTER: Can we have --

MR. RATLIFF: She needs to be --

MS. GEFTER: -- witness sworn --

MR. RATLIFF: -- sworn.

MS. GEFTER: -- please.

Whereupon,

ELLEN TOWNSEND-SMITH,

having been first duly sworn, was called as a witness herein,  
and was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RATLIFF:

Q Ms. Smith, did you prepare the staff testimony and the  
staff assessment in this case?

A Yes, I did.

Q And did you prepare the supplemental testimony as  
well?

A Yes, I did.

MR. RATLIFF: Those are Exhibits 28 and 29  
respectively.

BY MR. RATLIFF:

Q Is that testimony true and correct, to the best of  
your knowledge?

A Yes, it is.

Q You have any corrections to make to it?

A No, I do not.

Q Would you like to summarize it briefly for us?

A Yes, I do. What I did is I reviewed the Pittsburgh  
District Energy Facility application for certification. I  
reviewed the application to make sure that it complied with the  
applicable safety laws, ordinances, regulations and standards,  
looked to see if they had adequate measures for workers during  
construction, operation of the facility, and I made sure that  
they had adequate measures to protect against fire.

Also I wanted to make sure that they had adequate emergency response procedures. I have determined that the features of the project do comply with all applicable laws and do not present any unusual industrial safety or fire protection problems. IF the PDEF provides a construction safety and health plan and operation safety and health plan as required in conditions of certification, SAFETY-1 and -2, I believe that the project will incorporate significant measures to ensure adequate levels of industrial safety and fire protection and comply with laws.

Q Does that conclude your summary?

A Yes, it does.

MR. RATLIFF: The witness is available for questions.

MS. GEFTER: Does the Applicant have any cross-examination of the witness?

MR. THOMPSON: We do not. Thank you.

MS. GEFTER: Does any other party present have cross-examination of the witness?

Hearing none, does the committee have any questions?

Okay, I do have one question. Page 75 and 76 of your testimony, you list several items where workers need protection, smoking, the lockout-tagout regulations and confined spaces entry regulations. do the conditions as proposed cover those particular incidences?

THE WITNESS: Yes, they do. Basically what happens in conditions of certifications 1 and 2, their construction and operation safety plans, and they all, the Applicant is to comply

with Title 8, and in the plan it talks about a construction illness and prevention program which basically discusses all the different items like confined spaces, the hot work, smoking.

The fire protection plan, well, that's different. Basically just in the illness and injury and illness prevention plan, program, and the personal protective equipment program, those two particular features cover the items that you just asked about.

MS. GEFTER: Thank you. There any other questions from the committee?

Any redirect from staff?

MR. RATLIFF: No.

MS. GEFTER: Okay, witness may be excused. Thank you very much.

(Witness excused.)

MS. GEFTER: We are now at the conclusion of taking testimony this evening. We have a member of the public, Mr. Jim MacDonald, who wishes to address the committee, and you're welcome to come forward at this point. Thank you.

Introduce yourself for the record, please.

MR. MacDONALD: Yes, okay. My name is Jim MacDonald. I'm a trustee with the Pittsburg unified school district and a homeowner in the downtown as well as a landlord in the Jacklin Drive area.

There are a few items I want to make the committee aware of. First of all, this is the type of statements I get from the bay area quality management district, and starts out

saying this notice is being provided because you have the right to know about the air pollution in your community. On my disclosure I was not notified of any of the air pollution problems in the downtown in Pittsburg. It is general practice in this city not to notify residents in the downtown that they are actually adjacent to and influenced by bad fumes and other air pollution problems, noise pollution problems related to heavy industry.

So I'd like to put this in the record, I have tons of copies of those, I get this about every six months or so.

MS. GEFTER: Well, do you have copies for everyone here today?

MR. MacDONALD: No --

MS. GEFTER: Okay --

MR. MacDONALD: -- I do not, I'm sorry.

MS. GEFTER: -- well, we'll have to make copies and --

MR. MacDONALD: Okay.

MS. GEFTER: -- would you like this docketed then into the record?

MR. MacDONALD: Yes, I would.

MS. GEFTER: We could docket it. It won't be an exhibit but it can be part of the record in terms of being docketed by into the official docket file at the energy commission.

MR. MacDONALD: Okay, thank you.

MS. GEFTER: It can't be an exhibit, since you are not testifying. Thank you.

MR. MacDONALD: Okay, and then I do have some questions of the committee and statement.

Has the committee considered the City of Pittsburgh's own indignation and condemnation of industrial-type facilities built next to existing residential areas? The City of Pittsburgh has spent considerable time and money detailing negative effects of such projects on the health and welfare of the citizens. Such testimony can be found in the briefs and objections presented to the county in its licensing of the Keller canyon landfill adjacent to existent residential developments.

I'd like the briefs and testimonies of this lawsuit entered into as evidence of Pittsburgh's acknowledgement of such detrimental conditions being imposed on existing residential areas. The city's hypocrisy should be evident to anyone reading these documents.

Has the committee considered recent medical evidence that particulate matter is a major cause of asthma and that children of low income and disenfranchised groups, much of which can be found near and around the proposed plant site, are most susceptible to severe asthma attacks which can cause death. Children are most at risk because they are unable to receive the most up-to-date medical treatment which middle-class and upper-class families take for granted.

Has the committee considered recent medical evidence that perhaps 10 to 15 percent of the heart attacks in the United States are related to asthma-caused stress. This is just a recent finding that I just heard about within two weeks ago, and

basically what they're saying is asthma is a major contributor to heart attack in our elderly population.

In closing, I am not aware of the procedures for presenting such evidence to the committee. Perhaps the intervenor for the City of Antioch can help in bringing such testimony to the attention of the committee. I find it ironic as a citizen of Pittsburg and a trustee of the Pittsburg unified school district that I have to ask the assistance of the City of Antioch to help in the protection of the health and welfare of the children and citizens of Pittsburg.

Thank you. I'd like this entered as well.

MS. GEFTER: Okay, and when you -- I have question for you, Mr. MacDonald, okay, when you are asking for the assistance of the City of Antioch, in what way are you requesting that?

MR. MacDONALD: I don't know how the, first of all, I do not know how the evidence of the lawsuit between the city and the landfill can be put into the record. I know that me simply stating that it's there is not acceptable. I don't have the wherewithal to go out and get this documentation, to bring it to your attention.

MS. GEFTER: Well, you'd like to bring it to our attention for us to take administrative notice of that lawsuit?

MR. MacDONALD: If -- yes, I do not know, I do wish for you to see this documentation, I do wish for you to see what the City of Pittsburg has said in the past about the problems of building industrial facilities next to residential. If the City of Antioch could make that happen, bring that forward, I would

applaud their assistance. Both as a resident of Pittsburg and as a trustee of the Pittsburg unified school district.

If my simply asking you to ask your staff to investigate and pull this up is acceptable, that also would be, but I don't know, you know, what can or cannot be done. so I'm simply --

MS. GEFTER: So you're asking what we can do. Okay, I would refer you again to our public adviser, Roberta Mendonca.

MR. MacDONALD: Right.

MS. GEFTER: And I know you've spoken to her a bit. I don't know what kind of extensive conversations you had, but perhaps we can work with the public adviser to assist you in getting this information.

MR. MacDONALD: Most of what --

MS. GEFTER: -- and --

MR. MacDONALD: -- excuse me.

MS. GEFTER: -- into the record.

MR. MacDONALD: Excuse me. most of what she's been telling me is I've kind of got to do the legwork, and that's difficult. I'm not in a position at this time to --

MS. GEFTER: Okay.

MR. MacDONALD: -- track down all this information. It is available, it is out there.

MS. GEFTER: Okay, well, why don't we work through the public adviser and I will consult with her and --

MR. MacDONALD: Okay.

MS. GEFTER: -- we talk to you off the record and see what we can do about getting this information.

MR. MacDONALD: Okay.

MS. GEFTER: Okay, thank you very much.

MR. MacDONALD: Thank you.

MS. GEFTER: It's about time to wind up our session for this evening. The committee reconvene again on Monday at 1:00 PM again here in the city council chambers and we will take evidence on Monday on the following topics: on transmission system engineering, transmission line safety and nuisance, waste management and hazardous material management. And then on Monday evening, May 3rd, at 6:00 PM we will meet at the Pittsburg high school in their little theater, their creative arts building, and we will take testimony on public health and traffic and transportation.

We also have cumulative impacts listed, although essentially cumulative impacts are analyzed in each topic area, but we will have some conversation about that for the benefit of members of the public that evening.

So till Monday, May 3rd, at 1:00 PM in this same place, the hearing is adjourned.

(Whereupon, at 9:17 p.m., the hearing in the above-entitled matter was recessed, to reconvene on Monday, May 3, 1999, at 1:00 p.m., at the same place.)